Clinical Lecture

ON A CASE OF

DISSEMINATED CEREBRO-SPINAL SCLEROSIS IN AN EARLY STAGE, AFFECTING EXCLUSIVELY THE RIGHT EXTREMITIES.

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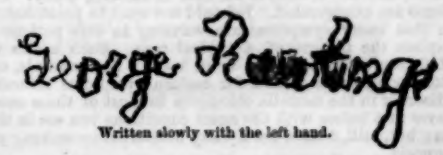
GENTLEMEN,—I bring before you to-day a patient lately admitted to Bed 1 in John ward, whose case furnishes me with some points of great interest, to which I shall ask your attention. It is one of a class well fitted for a clinical lecture, which, as you know, is nothing if not demonstrative, and little more than a systematic or didactic one if the patient is not brought before you. Clinical medicine has all to do with individual cases, and that teaching of it is most proper which best illustrates the points to be noted to each of you in as direct and living a manner as possible.

I will presently tell this man to walk across the theatre, and ask you to notice his gait. If you look at him first as he stands at rest, you will not observe anything remarkable about him. You see a young man in seeming good health, well nourished, and with complete control over his equilibrium. I now ask him to close his eyes. He stands erect, and without any tremor or instability. And now, as he walks, you notice a peculiarity in the action of his right leg. This limb moves stiffly, and there is over-action of it. It is lifted higher off the ground than the other, and is clumsy in movement. We say there is some spastic action in it. I now give him this glass of water to take in his right hand. At once, you see, a violent spasmodic action occurs, vigorous tremulation, so great that he nearly empties all the water before he has well seized the glass. If he next attempts to raise the vessel to his lips the movements become more and more exaggerated, so that all the water is spilt and the empty glass rattles against his teeth. I remove the vessel from his hand, and all the spasm ceases forthwith. As he stands quietly once more, you notice that the right arm remains tranquil and free from tremor. I try his power of grasp in each hand, and find a marked weakness in the right one, although he is a right-handed man. I now lay bare his forearms and compare the condition of his muscles. You observe no signs of wasting; the muscles are well developed and of good and equal tone on both sides. On examining his face, you see that his muscles of expression are stable and free from tremor, his lips firm, and his eyeballs quite steady. His pupils are unequal, certainly, but that is due to the action of atropine in one of them, used to allow examination of the retina of the right eye. No squint; no facial palsy. Testing his sensory functions, we find no abnormal state; all is as it should be. On inquiry as to any subjective sensorial sensations, he assures us all is natural in each of the four extremities. To curtail our further examination, I may add that there is nothing more to be detected by any physical methods we can employ, save that the knee-reflexes are exaggerated, markedly on the right side, while no ankle-clonus can be elicited. We have, then, a seemingly healthy and vigorous young man, whose only troubles are a clumsy limping gait, due to disorderly action of his right leg, and inability to employ his right hand and arm because of powerful tremulation and disorderly spasm, which come on the instant he directs his will into this extremity; and this is all. Before he leaves the theatre I ask him to repeat a sentence after me. You notice that he speaks clearly and fluently—with a good Wiltshire accent to be sure, but without any hesitation or difficulty; and yet, again, on protruding his tongue, you find no noteworthy tremor or peculiarity in it. Let us now take up the history of this case; it is very brief.

G. R——, aged twenty-one, a groom, was sent up to us by a former pupil of the hospital, and admitted on Feb. 14th. He states that nine months ago trembling movements began in his right arm, which prevented him from following his occupation. Later on the right leg became affected, so that he could not walk far on account of the weakness in it. Inquiry into his past history revealed no important illness. He had never had rheumatism, and there was no known history of this or of gout in his family. He had never had chorea, although his present ailment was at first believed to be of this nature. There was no neurotic history in his family, no indication of any previous paralytic attack or hemiplegia, no injury of any kind, and no history of fits. His duties entailed exposure to all kinds of weather, but to no extraordinary exposure. Previous to admission, he had been treated, we learned, with arsenic, belladonna, mineral water bathing at Bath, &c., all without avail.

You have already noted that the patient appears a healthy and well-nourished man, and that so long as he makes no voluntary efforts with the limbs of the right side of his body there is no indication of disease about him. I show you a specimen of his attempt to write his name. (See woodcut.) After violent efforts to control the right hand he made this unintelligible series of scrawls. With the left hand he has learned to write fairly legibly, but slowly and with difficulty, still without any spasm or tremor. He is awkward in setting his right forefinger on any point; thus he makes bad shots at his nose when he tries to touch the end of it, and hardly succeeds in getting near it. Dr. Steavenson has given us a report on the electrical reactions of the muscles of the affected limbs, and he states that they all react normally to both continuous and interrupted currents, and that there is no loss of electro-sensibility. We have seen the exaggerated

Attempt to write "George" with the right hand.



Written slowly with the left hand.

reflexes at the knees, especially on the affected side; and you may note an increase in the supinator-reflex of the right arm. No fibrillary muscular contractions. On examining the thorax, nothing abnormal is found. The heart-sounds are healthy and sufficiently loud. The urine is natural and the sphincters act perfectly. Special senses not perverted. No vertigo. Knows where his feet and hands are. Retinæ perfectly healthy, and optic discs well-defined. No nystagmus; pupils react naturally; no strabismus. No history of syphilis, and no signs of either inherited or acquired disease of this character. No tenderness on percussing the cranium at any point. In trying to follow with his right toes a circle drawn on the floor is very clumsy and erratic. He can jump, though with exertion of more force than is necessary for the distance traversed. The difficulty with the right leg is best seen when he tries to run.

We find, on the whole, more negative than positive signs in this man, and yet we have very definite symptoms before us. What is the lesion here, and where is it? What is the diagnosis and what the prognosis, and the best treatment of it? I mentioned that chorea had been at first suspected in the case. Chorea is sometimes one-sided, and often so, for a time in many instances. You would not or you should not long be mistaken as to this. You know that choreic movements are incessant except during sleep, and not only elicited by effort, although they are aggravated by voluntary efforts. And you would not expect to meet with a case of one-sided chorea lasting continuously for nine months. We

may, therefore, put that aside. You think, perhaps, of another nervous disorder characterised by tremors and paralysis agitans; the shaking palsy (Parkinson's disease) suggests itself to you. Is this the malady before us? Here is Parkinson's own definition, written in 1817; observe if it tallies with our case: "Involuntary tremulous motion with lessened muscular power in parts not in action, and even when supported; with a propensity to bend the trunk forwards and to pass from a walking to a running pace, the senses and intellect being uninjured." This definition will not apply here. The rule is for the tremor to be persistent and constant in shaking palsy, and rather to cease or moderate when action is induced. The contrary is the case here. Action at once induces tremor. The age of this patient is against his being the subject of shaking palsy, this disorder being very rare before forty years of age are reached. Have we here to deal with a case of so-called post-hemiplegic chorea? I think not, because we have no history and no signs of a past attack of hemiplegia, and the characters of this man's tremors are not those of the disorder I have alluded to. To mention mercurial tremors is sufficient. These are symmetrical, and affect the head, and the signs of mercurialism are always obvious. We can also exclude hysterical tremors and malingering.

We are brought, at last, to consider this case, then, as one of a class known as insular or disseminated cerebro-spinal sclerosis, or Charcot's disease, as it has been called. It is a remarkable example, certainly, because the disorder is, at present,—note, I say, *at present,—hemiplegic in character, and also manifestly in an early stage.* We do not often see such cases. This is our diagnosis: sclerotic patches situated in the left half of the brain, possibly in corpus striatum or crus, and possibly in some portion of the medulla spinalis. I should not like to pronounce with greater certainty anything more than this at present, though I might exclude the inferior frontal convolution and parts around the fissure of Sylvius, with some other regions. We may exclude scrofulous and syphilitic disease in the case, and we are in face of the characteristic lesions which are usually found in these cases, and for which I refer you to your studies in morbid histology. The age of our patient is just that at which this malady declares itself. It is equally common in each sex, and very rare after forty. Exposure to cold has been a commonly assigned cause. In this disease no muscular *wasting* occurs, although loss of muscular *power* is found, and no electrical changes arise. Paresis precedes the tremors, and the reverse is the case in shaking palsy. The reflexes are exaggerated. I should not omit to point out to you that many symptoms are wanting in this patient to complete the picture of a typical case. Such a one we had fifteen months ago in John ward. For example, one looks for nystagmus, and for certain symptoms referable to disorder in the medulla oblongata in most of these cases. I never met before with the exact conditions you see in this man; but, still, I have hardly any hesitation in making my diagnosis.

As to prognosis. This is certainly grave. I surmise that we have so far only early symptoms before us, and that the disease will make sad progress in time. We may fear the onset of paresis and tremors in the sound limbs, and the implication of speech with what are termed bulbar symptoms. The sclerotic process may spread and new patches of it occur in other portions of the cerebro-spinal system, thus setting up new symptoms. The course of the malady is slow, and may occupy from five to ten years. Deceptive periods of improvement may occur from time to time. Too often the disease goes on from bad to worse till the patient is rendered helpless and bedridden, the limbs becoming rigid and paralytic dementia supervening. Can we do nothing to arrest this terrible process? Must it go on to the bitter end? Alas! the resources of our art are, we must honestly avow, powerless as yet to avert the progress of this terrible malady. Physicians have been very assiduous in elaborating the differential diagnosis of nervous diseases of late years, but in respect to therapeutics we have as yet scored few triumphs. The outlook is bad, and we might almost despair of rendering help. We shall never do this, I hope, but rather strive the harder to find means of arresting this untoward process. No one drug is pre-eminently indicated. I am giving this man mercury, and mean to bring him fully under its influence. He takes three grains of blue pill each night. Not that I am trying to eradicate any syphilitic taint, for, in truth, we know of none in the case. But we know that mercury is a powerful drug and able to modify nutritional force very materially. We shall do our patient no harm with it. It may be that some of these obscure perversions of growth are evolutional forms of syphilis transmitted from infected ancestry, and so mercury, fully tried, may chance to be of special use. We know, at any rate, that in the peculiar form of systematic sclerosis of the posterior spinal columns known as tabes dorsalis—locomotor ataxia—syphilis plays a very prominent part, to the extent, indeed, of 80 per cent., or more, of all cases. Not that the lesion is itself directly syphilitic or gummatous, but that syphilis, as syphilis, seems to predispose to the particular form of sclerotic change in the cord which sets up the disease we know as tabes dorsalis. We are also maintaining the nutrition of this man's nervous system by cod-liver oil and a good diet. Nitrate of silver has been found of use in early stages of this disease. But for some time to come I should prefer to use mercury and iodide of potassium and carefully watch their effects, and I shall bring the results and the further history of this remarkable case before you on a subsequent occasion.

ON THE

SIGNIFICANCE OF A PECULIAR MURMUR IN RELATION TO THE DIAGNOSIS OF INTRA-THORACIC DISEASES.

BY J. S. BRISTOWE, M.D. LOND.

(*Continued from p. 837.*)

CASE 2. *Aneurysm of aortic arch: compression of both innominate veins, and communication between aneurysm and left innominate; great œdema and congestion of head and neck, and upper part of trunk; death; autopsy.*—Susannah F——, a married woman aged forty-six, was admitted under my care on May 27th, 1884. She has had moderately good health on the whole; has had one child, no miscarriages; has never had syphilis. Nine years ago she had typhoid fever, with two relapses, and was in hospital for nine months. Last winter she complained a good deal of rheumatism. About that time she first suffered from shortness of breath and palpitation. Five or six weeks ago the patient first observed swelling of the neck and about the eyes, and a little later she noticed some difficulty of swallowing, and first complained of aching pain between the shoulders. She has had some cough all along. The above symptoms have increased upon her up to the present time.

The face and neck of the patient are much swollen and œdematous, and the lips, cheeks, eyelids, and ears much congested; the swelling involves also the upper part of the chest and the shoulders and upper arms. The veins in the neck are greatly distended, and form large spongy masses just above the clavicles; the veins also in the upper part of the thorax, in front and behind, and about the shoulders, are much enlarged. There is no ascites, and no œdema whatever below the nipples. The lower extremities, indeed, are emaciated. She complains of dyspnœa, cough, and severe pain in the chest, more especially between the shoulders. Chest generally resonant, and breath-sounds normal, except at the base, where there is some crepitation. Cardiac dulness not increased in area; apex beats in sixth interspace, directly below the nipple; all over the cardiac area, and along the arch of the aorta, may be heard a loud systolic murmur, and also what by some is regarded as a diastolic murmur. The fact, however, seems to be that a peculiar prolonged murmur, commencing with the systole and continued through the greater part of the diastole, is audible over the aortic area and upwards to the right clavicle, diminishing in intensity as one passes from this region. The systolic portion of the murmur is loud, somewhat musical, and of uniform character during the whole of the cardiac systole; but the murmur is continued through and after the second sound as a kind of musical hum, which gradually dies away. The murmur is audible in the back, along the course of the aorta. There is no definite dulness or pulsation to be detected beneath the clavicles or in the course of the aortic arch. Pulse 88, equal in the two wrists, not jerky; respiration 24, but laboured; and when she

coughs there is manifest stridor. Phonation natural; no sign to the laryngoscope of affection of the larynx. The liver extends an inch or two below the ribs, and is tender on pressure. The urine contains a trace of albumen. Nothing is noticeable with respect to the digestive functions. There does not seem to be any actual difficulty in the act of swallowing; no enlarged glands or tumours to be felt anywhere.

There is very little to be added to the above account, excepting that repeated examinations fully confirmed the observations above detailed. With occasional imperfect remissions she gradually got worse up to the time of her death. The dilatation of the veins in the neck, upper part of the thorax, and shoulders varied somewhat, but on the whole increased. The œdema also varied to some extent, but also on the whole increased; and latterly, partly in consequence of this, partly in consequence of the concurrent lividity of the surface, her aspect was most distressing—indeed hideous. Her face, neck, shoulders, and bosom became enormously swollen, her eyelids congested and closed, her nose buried in her cheeks, her lips thick and the lower one pendulous, with a huge double chin prolonged laterally to the lobes of her ears. Latterly, too, the œdema extended down the arms, and still later involved also the abdominal walls and vulva, and even the lower extremities; moreover, petechial extravasations appeared beneath the integuments of the face and neck and upper part of the back. The dyspnœa became aggravated, and she had for the most part to be propped up in bed, and slept in this posture with her head lolling forwards over her chest. Her cough was troublesome and paroxysmal, and was attended with more or less muco-purulent expectoration, and on two or three occasions with hæmoptysis. Deep breathing was always attended with stridor, but there was never any impairment of phonation or involvement of the vocal cords. The condition of the thoracic viscera, so far as we could ascertain, remained unaltered. There were never any clear local signs of aneurysm or other tumour; never any distinct proof of consolidation of lungs or effusion into the pleuræ; and the murmur at the base of the heart retained its characteristic features from first to last. It must be added, however, that the great œdema of the thoracic walls, and more especially the enormous bulk of the mammæ interfered more and more with physical examination of the chest. The pulses at the wrists remained equal; but it was noted once or twice that the left pupil was somewhat smaller than the right. No enlarged glands ever appeared in the neck or elsewhere, and no tumours of any kind in the abdomen. She complained usually of more or less pain in the upper part of the chest and between the shoulders, sometimes a sense of pricking, sometimes aching or cutting; and occasionally the pain extended down the right arm; less frequently down both arms. This pain was often severe enough to keep her awake. The breasts also became very painful. She never had any actual difficulty in swallowing, and for the most part took food fairly well. But she gradually got weaker; and during the last three or four weeks became very drowsy, at times being difficult to arouse, and when awake inclined to ramble. Her temperature throughout her illness was generally subnormal. She died on August 1st, on which day it rose to 100·4°.

Necropsy.—There was much anasarca and lividity, especially in the head and neck and upper part of the trunk. There were some hæmorrhages in the substance of the left pectoralis major. Chest: both pleuræ adherent, the adhesions being œdematous. Lungs dark-red and firm but crepitant everywhere, excepting the left lower lobe, which was quite collapsed. The bronchial tubes contained frothy mucus. The pericardium presented a small quantity of serum, and towards the base of the heart appeared thickened. The right side of the heart was somewhat enlarged, but on the whole the organ was little, if at all, above the normal bulk. The valves were all healthy. The coronary arteries presented patches of atheroma. An aneurysm about two inches in diameter sprang from the transverse arch of the aorta about three inches above the valves, and bulged towards the right. There was a little old laminated clot adherent to its walls, and the cavity contained also a little pale and coloured recent clot. The aneurysm pressed upon the innominate veins, without obliterating them, and communicated in front by two small round openings with the left innominate vein. The larger of these was about a line in diameter. The aortic arch was very atheromatous. The abdominal cavity did not contain any fluid. The liver was congested, and evidently in the early "nutmeg" condition. The spleen was large and firm. The kidneys were rather small, and somewhat granular on the surface. There were two small fibrous tumours connected with the outer surface of the uterus, which was retroverted. There were no urates in the right great toe-joint.

I need scarcely say, perhaps, that the case which I have just detailed, and of which whatever was mysterious during life is fully explained by the post-mortem revelations, was not only interesting to those who watched it, but presented difficulties to those who tried to interpret it. I must confess that my own diagnosis was erroneous. It was of course quite obvious that the patient was suffering from an intra-thoracic tumour, which, amongst other things, obstructed either the vena cava descendens or both innominate veins. It was quite obvious, too, that there was a loud murmur commencing with the cardiac systole, most intense at the base of the heart and over the manubrium, but audible even to the apex. As has already been pointed out, there were some differences of opinion as to the character of the murmur or murmurs. Some of my younger colleagues, men of ability and experience, held that there was a double aortic murmur, and consequently constriction and regurgitation at the aortic orifice. I always maintained that the murmur was single and such as it has been described above, and that, therefore, it could not possibly indicate simple disease at the aortic orifice; and my view was so far confirmed at the post-mortem that the aortic valve was found absolutely healthy. But dominated by the memory of my first case, I leant to the belief that the patient was suffering from a highly vascular malignant growth. I think now that what turned out to be the real condition of things ought to have presented itself to my mind; but it did not. I went down late to the post-mortem examination; indeed, it was supposed to be completed; and I learnt that the case was one of simple aortic aneurysm, associated with healthy cardiac valves. I at once pointed out that nothing had been discovered to explain the murmur which had misled me during the patient's lifetime, and turning to a very able clerk of mine, a high wrangler, I said, "Mackenzie, you are our greatest authority on acoustics and hydrostatics, and must help us to solve the riddle." He at once said, "Perhaps there is a communication between the aneurysm and a vein." I acquiesced, and straightway a careful examination was made among the scattered fragments, which resulted in the discovery that such a communication existed. Had I not fortunately been present at the autopsy an important fact in the case would have been wholly overlooked, and a clinical phenomenon of interest would have remained without satisfactory explanation.

(To be concluded).

CASES

ILLUSTRATIVE OF CEREBRAL SURGERY.

By WILLIAM MACEWEN, M.D.,
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CASE OF LOCALISED ENCEPHALITIS AND LEPTOMENINGITIS.

Summary.—Patient admitted with impairment of power in left arm, accompanied by muscular twitchings and pricking sensations in some parts; lesion diagnosed to be in upper half of ascending frontal convolutions; trephining; membrane-like patch over surface of brain involving arachnoid and pia mater along with external surface of grey matter; blood infiltrated into substance of brain in ascending frontal convolution; removal; reimplantation of bone; complete recovery.

F. N——, aged thirty-six years, a miner, was admitted into Ward 21, Glasgow Royal Infirmary, on November 27th, 1883, complaining of weakness, inability to work, and certain symptoms which were referable to the motor centres.

History.—He had been in good health until August, 1883, when by falling downstairs he was rendered unconscious, in which state he continued for about twelve hours. There had been a little blood about one of his ears, but whether this came from a superficial abrasion or was indicative of a more serious condition could not be ascertained. When he regained consciousness he found himself to be quite well, with the exception of experiencing a giddy sensation when he attempted to walk. He could move his arms and legs

freely, he had full possession of sight, hearing, taste, and smell, and he believed himself to have quite recovered from his fall. Soon afterwards he attempted to work, but found that he was too weak to do so, and as time passed, instead of getting stronger he became weaker, and he therefore sought medical aid. He ultimately came to Glasgow, and was admitted into the medical wards of the Glasgow Royal Infirmary on September 18th, 1883, eighteen days after the accident. From the resident assistant the following was learned concerning his state at that time. He had partial right-sided facial paralysis. It was not clear whether this paralysis was due to a cerebral or a peripheral cause—some interference with the facial in its course through the temporal bone. Though the patient complained of weakness, no impairment in sensation or motion was detected over the trunk or limbs. He was treated by a series of blisters over the temporal region and rest. When he left the medical wards there was an improvement in the state of his face, though he remained otherwise in much the same condition. After getting home he repeatedly attempted to work, but found that he was quite unable to do so—first, from a feeling of general weakness; second, from a feebleness in the left arm; third, from a vertigo which came over him when he assumed the upright position, after stooping, or when he made any sudden movement; and fourth, from a general sensation of oppression, which he referred to his head. He also found that he was falling off in flesh. Some time afterwards he sought admission, on the advice of his physician, to the surgical wards of the Royal Infirmary. He was admitted to Ward 21 on Nov. 27th, 1883, twelve weeks and four days after the accident, his condition then being as follows:—He was a tall strongly-built man, having a shrunken and careworn aspect, his features being rather pinched. There was a trace of right-sided facial paralysis evinced by a slight passivity of expression, which was confirmed when he attempted to elevate his eyebrows. Occasionally the muscles on the right side of his face twitched. The pupil of his right eye was sluggish, responding feebly to light, so that when exposed to the full light of the window, it only contracted to about half the extent of its fellow. There was no external mark of injury on his head, though he complained of a feeling of weight and oppression in it, which, however, was diffuse. The muscles of his arms were well developed, though soft, and those of his left arm seemed slightly wasted. The power of grasp of his left hand was very feeble. The muscles of his left arm were frequently spasmodically jerked, and he experienced pricking sensations from the shoulder down to the fingers. He preferred not to hold anything breakable in his hand, because he said that "he could not trust it," as he was liable to drop anything which he might have in it. Though he had this want of confidence in his hand, he did not let anything fall while under examination. The condition of the arm as to want of power and the twitchings in the muscles were becoming steadily worse. When he stooped and rose quickly and then tried to walk he staggered, and he said that he felt giddy for some time afterwards. His temperature was occasionally slightly above normal. His lungs, kidneys, and other organs were sound. The head was shaven and another examination was made, but no sign of injury or abnormal irregularity could be detected.

From the history, as well as from his condition at the time of the examination, it was obvious that there was a lesion of the motor cortex in the upper half of the right ascending frontal convolution. As to the pathology, it was probable that irritation had been set up round an extravasation of blood which had taken place into the brain cortex at the above point as the result of a cerebral contusion. From the time that had elapsed since the injury, the extravasated blood would have undergone secondary changes, and it was probable from the increase and progress of the symptoms described as affecting the left arm that the irritation was of an inflammatory nature, although there was no pus production—a localised encephalitis, and probably a leptomeningitis. The former facial paralysis was probably due to an injury of the nerve, and not to a central cause. As counter-irritation had been employed for a considerable period without effect, it was not deemed expedient again to have recourse to it, more especially as it could not influence the blood effused. Dr. Robertson was asked to see this patient, and quite concurred in the diagnosis, and in the necessity for operative treatment. The patient was very desirous that something should be done to alleviate his condition, as he found himself totally unfitted for work, and felt that he was daily becoming worse. When it became known to him that his brain might be operated on for the relief of his symptoms, he eagerly begged that it should be done.

Operation, December 8th, 1883: The patient was placed under chloroform and a portion of the right parietal bone was removed, about one inch behind the auriculo-bregmatic line, and one inch above a line drawn from the external angular process of the frontal to the upper angle of the lambdoidal suture. A circular portion of skull was elevated one inch in diameter, exposing the middle of the ascending frontal and parietal convolutions. The disc of skull elevated was somewhat thinner than usual, and its internal table was slightly eroded. The dura mater, instead of presenting its usual smooth glistening appearance, had an irregular roughened surface, and was of a yellowish-grey colour, with here and there a dark patch indicating blood-clots in the subdural space. It was closely adherent to the skull round the margins of the trephine aperture. A crucial incision was made into the dura mater, when a considerable quantity of clear fluid along with some clots of blood about the size of a large bean escaped. Other clots had to be removed, as they were adhering to the structure underneath. After taking away these clots there were no brain pulsations visible, and the surface which then presented itself was of a somewhat yellowish colour, having an opaque dense aspect, and being adherent to the tissues underneath. This membrane-like patch lay chiefly over the ascending frontal convolution, dipping down into the fissure of Rolando. An incision was made through this layer, when it was seen to be about an eighth of an inch in thickness, and to be probably composed of the arachnoid, pia mater, and the superficial portion of the cortex, all of them fused together by plastic exudation, so as to resemble a single dense membrane, the various layers of which could not be differentiated. The underlying brain tissue in the upper part of the ascending frontal convolution was infiltrated with minute blood-clots, some of them about the size of a pea, others that of a barley grain. Till this incision was made through this membrane-like patch into the brain substance there were no pulsations visible; but when this was done the pulsations became distinct, and at the same moment many of the little clots, along with a quantity of serum, became extruded from the brain tissue, many of them coming from some depth, apparently helped to the surface by the cerebral pulsations. These clots were of a yellowish-brown colour externally, and when broken their interior was still black. A short time was given to permit the brain impulses to complete this extrusion, after which, as a few clots could still be discerned in the interior of the brain, they were gently loosened, when they were quickly extruded by the same movement. After all the clots were removed, a minute vessel on the brain surface continuing to bleed, pressure was exerted for a minute, which completely occluded it. The brain substance at this part seemed softer than normal, and was of a yellowish-brown colour. The dura mater was replaced, and the disc of bone which had been removed, and which had its periosteum entirely stripped off, was divided into several portions, and reimplanted in the aperture in the skull, a small opening being left at the side for drainage. The scalp was brought together with chromic gut, a decalcified chicken-bone tube being placed between the scalp and the skull for drainage. The entire operation was done under the carbolised spray, and eucalyptus dressings were applied. Forty-eight hours afterwards the wound was redressed, when a slight blood-stain was found on the dressing. Three weeks afterwards the wound was examined for the second time, and found healed. The patient's highest rectal temperature was 100·4° F. He never had a bad symptom, felt perfectly easy, and the only difficulty experienced was in persuading him to remain in bed, and in preventing him from indulging in other than low diet. The skull was firm over the trephine opening, into which the bones had been reimplanted. At the end of forty-eight hours there was almost a paralytic state of the left arm; he could not move the fingers. At the expiration of a week, when the arm was permitted to be examined for the second time, this had quite gone. His fingers were moved freely, and he could raise his arm and flex all the joints freely. From the third day after the operation there were no jerkings in the muscles of the arm. At the end of six weeks he had improved greatly in strength generally, and he declared that his left arm was as strong as ever; certainly it had gained greatly in strength. He was now eager and anxious to be

permitted to get out to work. He was dismissed at the end of two months. Eight months afterwards he reported himself as regularly at work and in excellent health, the power of his left arm having been quite restored.

(To be concluded.)

A CONTRIBUTION TO THE

CLINICAL STUDY OF THE LIVER VIEWED THROUGH THE URINE.

BY GEORGE OLIVER, M.D. LOND.

(Continued from page 850.)

No. II.—THE PHYSIOLOGICAL AND CLINICAL ASPECTS OF THE BILE SALTS IN THE URINE.

I. *The bile salts are increased.*—My clinical experience has demonstrated an excess of biliary salts in the urine in the following morbid conditions:—

1. *Jaundice.*—Authorities are divided on the question of bile salts in the urine of jaundice, some (such as Frerichs, Städler, Murchison) holding that they are invariably absent, believing that they are decomposed by the blood; others (Kühne) always detecting them, whatever the form and the duration of the jaundice, and others (George Harley) asserting the presence of them in all cases of obstructive jaundice, while, in fact, bile is being secreted by the liver and absorbed into the blood, but failing to discover them when the liver, from disorganisation, ceases to secrete bile. All this diversity of opinion must, I think, be referred either to the defectiveness of the processes hitherto employed for the separation of the bile acids from the urine, or to the want of a clinical test of sufficient accuracy and delicacy. So far my experience agrees with that of Kühne; for I have invariably found an increase, and generally a very decided increase, of the bile salts in all forms and stages of jaundice; this even in cases of from one to four years' duration. According to my experience of jaundice, the bile salts are not only apt to appear in the urine in increased quantity before the appearance of bile pigment, but to persist for some weeks after the urine has become quite free from it. In several cases I have found the peptone test of considerable practical value in affording an early intimation of the presence of conditions favouring jaundice, which was apparently averted by prompt treatment. Only lately I came across such a case, when I expressed a fear that jaundice would follow; I was then told that the patient was jaundiced under like circumstances six years ago. A full dose of calomel and colocynth followed by sulphate of magnesia, however, brought away a large quantity of what had all the appearance of pent-up biliary matter, and the patient gradually convalesced without the supervention of jaundice, the urine the while presenting a diminishing charge of bile salts, until at last it became quite normal, and the fæces assumed a healthy apperance. The test has also proved useful in my hands in indicating when a case of jaundice, after the ordinary bile flow into the bowels has taken place, may be considered fairly out of the wood, and when the liability to relapse may be regarded as unlikely. This pale urine was passed by a patient six weeks after the bile appeared freely in the evacuations. Yet it contains, as you observe, over 100 per cent. increase of the biliary salts. The patient is now, however, quite well.[1]

2. *Functional disorders of the liver; biliousness.*—The bilious may be broadly divided into two classes—namely, those in whom the liver is loaded with biliary products, either from habitual per-secretion, or from an accumulation of them, which is less or more constant, or is only occasional; and those in whom the secretion of bile is always below the average—sub-secretion.

Acute biliousness.—Those who always "make" bile, as well as those who suffer from biliary engorgement due to defective excretion, &c., are prone to "hepatic storms" or periodical overflows of bile either into the bowels or the blood, or into both; as when there occurs a sudden alteration of arterial tension,[2] as a rise from excitement, or a fall from chilling or other meteorological influence, or when a dietetic error is committed. Then, when the bile derivatives are absorbed too freely into the blood, as they generally are, the symptoms resemble those of acute poisoning by small doses of the bile salts in animals—namely, feeble pulse, pallor, coldness of the extremities, and a feeling of chilliness throughout, from imperfect filling of the arterioles; slow, sometimes gasping breathing; nausea and vomiting, and occasionally diarrhœa. In migraine these symptoms, which characterise the ordinary forms of acute poisoning by the bile salts, are overshadowed by the painful disturbances of the fifth and of the optic nerves; neurotic effects which *may* spring from the same central cause; but in these cases the attack is probably preceded or accompanied by an arrest or a diminution of the renal elimination of the biliary salts, followed by an augmented discharge which affords immediate relief.[3] In an ordinary attack of acute biliousness the bile salts flush the blood and are eliminated in increased quantity, and more particularly so towards the close of the disturbance. Acute bile-acid poisoning may, however, go beyond the stage implied by the ordinary bilious attack; it may even become so intense as to induce convulsions—which, however, as a rule, subside as the suddenly induced excess of the colourless bile product in the blood is cleared away, either by the kidneys, or by the bowels or by the skin; such a severe disturbance is apt to follow an excessive indulgence in alcohol, or the taking of some indigestible article of diet, or of too large a meal.

Chronic biliousness is also a cause of an increased systemic diffusion of bile salts, and the excessive renal elimination of them. Then the disorder is, as a rule, not purely functional, but depends on hepatic congestion induced by alcohol:[4] the initial stage of cirrhosis, by too good living, or by some obstruction to the portal circulation, as in heart disease, or by the congestive effects of malaria on the liver and spleen. Cases of chronic biliousness are, however, now and then met with which, though providing an excess of bile salts in the urine, do not exhibit the ordinary signs of hepatic congestion, and are not referable to the causes just indicated. But chronic biliousness perhaps, in the majority of cases, arises either from subsecretion of bile or the retention of biliary elements in the blood. When constipation is a prominent feature in a case of biliousness, as it frequently is, the bile salts will be detected in greater excess than when the bowels are regular or free; and this is not surprising, for constipation means retention of bile about the portal system, favouring as it does a retarded flow in the bile-ducts and absorption of cholate of sodium contained in the contents of the small intestines and in the fæces.[5] In any case of hepatic disturbance whenever the edge of the liver is to be felt below the margin of the thorax, and is sensitive to the touch, or when, without obvious enlargement of the liver, the fingers pressed well under the lower right ribs elicit tenderness, bile salts in excess will in all probability be discovered in the urine. But, on the other hand, these constituents are frequently found in excess without there being any tenderness of the liver. In chronic biliary derangement I have frequently found the bile salts in greater excess in the urine voided during the period of digestion than in that discharged before meals—e.g., two hours after breakfast than on rising. The urine of hepatic embarrassment, producing acute and chronic biliousness, is

[1] According to my observations, jaundiced urine is but a portion of the large group of urines containing biliary matter in pathological proportions. Hence I venture to use the term "choluria," in order to tersely indicate the presence of the colourless bile elements in abnormal quantity in the urine.

[2] Variations of arterial and venous tension disturbing the biliary secretion is a matter of interest in practical medicine. The physiologist knows that the secretion of bile is increased by injecting blood into the veins, and diminished by bleeding or by compression of the aorta, and by obstructing the portal vein. All this has an important bearing on the pathological phenomena of the liver and the treatment of them. How often does a judicious attempt to raise the arterial tension in subcholia do more good than the whole battery of cholagogues, the poor anæmic liver rising to a higher standard of work in proportion as its blood-supply is improved?

[3] During the course of an attack of migraine I am inclined to think, from what I have observed, that there is in the typically neurotic forms of this ailment a check to elimination; then there occurs a flush by some channel—such as that of the kidneys, the skin, or the bowels—which brings heavenly freedom from the grip of the enemy. Sleep in many cases, and remedies addressed to the neurotic state in others, favour the freedom. This is a large subject, and can only be lightly touched in passing.

[4] I have found the peptone test very useful in detecting the abuse of alcohol. It would seem as if the urinary bile salts rise in quantity in the early stages of hepatic congestion from alcohol—in fact, before any enlargement can be made out or any tenderness can be detected.

[5] I have, however, every now and then discovered a decided excess of bile salts in the urine in cases of biliousness with free alvine evacuations, these being quite loose and bright-yellow, as if the biliary elements overflowed into the blood as well as into the bowels.

that of subjaundice—a minimal form of jaundice, which, like the major form, is characterised by a surcharge of bile derivatives in the blood and the elimination of them by the kidneys, but differs from ordinary jaundice in furnishing urine which not only contains a smaller proportion of bile elements, but always presents an excess of the biliary salts, while it is only occasionally pigmentous.

3. *Diseases of the liver apart from jaundice.*—I have found an excess of bile salts in the urine of carcinoma, amyloid disease, enlargement of the liver generally, cirrhosis, and in that of tumours probably hepatic. In passing diseases of the liver, such as hepatitis, I am disposed to think the peptone test will prove of some clinical value in showing when the liver has become completely restored.[6]

4. *Diseases of the spleen.*—In several cases of choluria the liver was enlarged as well as the spleen, but in two the enlargement was confined entirely, or almost entirely, to the spleen;[7] but notwithstanding the absence of definite hepatic disease, the bile salts appeared in the urine of these cases in large excess, associated with a little albumen, and they were not accompanied by bile pigment. Here is a good specimen voided by a patient under treatment; it is not pigmented, and it contains 300 per cent. increase of bile salts; the patient has a large spleen from ague, but he has no hepatic enlargement; in fact his liver appears to be below the normal size. This clinical fact appears to me noteworthy in connexion with some experimental data bearing on the relative amount of bile salts present in the splenic pulp and in the parenchyma of the liver, which will appear in the addendum to this paper.[8]

5. *Fever.*—A rise of temperature from whatever cause always induces a systemic excess of bile salts. With a temperature of 104°, and without any suspicion of liver affection, I have known the renal elimination to exceed 400 per cent. increase over the normal standard. Even a slight rise, such as that of 1° or 2°, increases the renal discharge of these elements. I need scarcely mention the intimate pathological connexion that subsists between the turgescence and consequent activity of the spleen and fever. This fact, viewed by the side of the urinary excess of bile salts in fever as well as in splenic disease apart from fever, is interesting when we attempt to take into consideration the probable causes of the prominent symptoms of the febrile movement, especially the prodromal ones. Some, such as chilliness and even rigors, nausea, vomiting, diarrhœa, epistaxis, convulsions, and the miniature clonic contractions of subsultus tendinum, I am disposed to refer to an excessive charge of bile salts in the blood. But how are the rheumatic symptoms—aching of the back and limbs, severe muscular and even articular pains—to be accounted for? The spleen also suggests an explanation, for according to physiological observation it would seem as if the splenic pulp were the birthplace of uric and other organic acids—such as lactic, acetic, butyric, formic, and succinic. In connexion with this point perhaps I should state that on using a sensitive litmus paper I have always found the splenic pulp of the freshly killed animal distinctly acid; and the same observation applies to the human spleens, which I have examined twenty-four hours after death, and to the recent decoctions of spleens and livers of man and animals.

6. *Hæmolytic diseases.*—Dissolution of the blood—and especially of red discs—obstruction of the capillaries, and hæmorrhages are prominent facts in the poisoning of animals by injecting bile salts into their veins. On turning to clinical experience we find the counterpart of these experimental data.

(*a*) *Anæmia.*—In anæmia the balance, which in health is maintained between the generation and the destruction of the blood-corpuscles, is disturbed. There would seem to be either a failure in the hæmogenesis, or an increase in the hæmolytic process; determining, as the case may be, a hæmogenic or a hæmolytic form of the ailment. Probably the defect is generally on the side of construction; but I have met with several instructive examples of the hæmolytic type, in which there was a considerable excess, pretty regularly and persistently maintained, of bile salts in the urine; then it was that some attention to the portal organs was indicated, and was of greater service than the ferruginous treatment of the blood state, the pernicious work of the liver apparently causing the failure. I suspect that arsenic is a valuable remedy in some of these cases of hæmolytic anæmia; purgative doses of the sulphates are certainly useful. The following figures indicate the range of increase of the urinary bile salts which I have recorded in this form of anæmia: 400, 300, 60, 100, 300, 60, 60, 400.

As yet I have not had opportunities of studying, in connexion with the bile salts, *pernicious anæmia* and *progressive anæmia*, which has a *primâ-facie* resemblance to the pernicious form.

In *splenic leucocythæmia* there is a large excess of the biliary salts in the urine. Here is a sample of the urine of a case in the London Hospital; it has a specific gravity of 1009, and contains a little albumen, and you observe that it is quite pale, free from biliary pigment, and that it is charged with as much as 750 per cent. increase of the bile salts, for eight minims of it produce the same degree of opacity with sixty minims of the peptone solution as do sixty minims of healthy urine.

In *malarial anæmia* (in cases even that did not present recognisable enlargement of the liver or spleen, or other organic changes) I have found a marked increase. This is the urine of a case of malarial anæmia in the Charing-cross Hospital; it contains, as you observe, over 300 per cent. increase of the biliary salts.

(To be continued.)

[6] In the discussion which followed the reading of this paper, Dr. Clifford Allbutt related the case of a convalescent from hepatitis sent to him for his opinion as to the recovery of the liver, and the advisability or otherwise of the patient's return to his employment. "On using the peptone test," said Dr. Allbutt, "a large precipitate appeared, and I felt justified by the information thus provided in reporting against the complete restoration of the liver, and in advising a further reprieve from work."

[7] Of course splenic enlargement does not necessarily imply increased activity of splenic function. As this paper is passing through the press I come across a good example in a patient of Dr. Ward's, of Harrogate. There was no choluria, though the spleen was found post mortem considerably enlarged; the portal and splenic veins were embedded in a mass of matted-up and thickened glandular tissue, and were clearly obstructed, for no blood issued from the portal vein on section; the liver was highly anæmic and fatty, the bile-ducts were entirely bileless, and a decoction of the parenchyma of the liver afforded a mere trace of bile salts. This case was, as it were, a beautiful and neat experiment planned by the hand of nature to shut off the products of spleen work from the liver and the systemic blood.

[8] Inasmuch as in experimentation with bile salts injected into the veins of animals the serum becomes loaded with fatty molecules, it is interesting to note some observations on this point in various cholæmic diseases, made by competent observers long before the cause of the fatty serum was apparent. Traill, over forty years ago, remarked on the creamy or milky serum of hepatitis, and on several occasions showed that the turbidity was due to a large quantity of fat. In inflammation of the spleen (lienitis) the serum was observed by Cullen, Testa, and Heusinger to be turbid from fatty matter. Simon, in his "Animal Chemistry," gives many interesting analyses of the blood of fevers, inflammations, jaundice, &c.—all these being cholæmic diseases—showing an excess of fat. Then, again, in leucocythæmia (another cholæmic disease) the blood is distinctly increased (Robertson and Lambert).

CASES OF LITHOTOMY IN THE ADULT,

WITH REMARKS.

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CASE 1. *Four large calculi and one small one removed by the median operation.*—Stephen H——, thirty, a well-made man, was admitted into the London Hospital on Dec. 19th, 1871, in a very critical condition. At first he affirmed that his illness only dated back for four or five weeks, but subsequently, on cross-examination, it was ascertained that suspicious symptoms had existed for some years. Occasionally, after exertion, blood was found in the urine, and at varying intervals he was obliged to lie up for a few days; a bottle of medicine, however, soon set him right. For some time he had experienced an itching sensation at the end of the penis. When he ran about or jumped he felt "something move in his inside," and such exercise was followed by the appearance of blood in his urine. His urine never stopped suddenly while micturating, but he had often felt pain after the act was completed. The pain would extend round his loins, and his testicles would be drawn up. Five weeks before admission he caught cold. He then noticed a discharge from his urethra, and, finally, he suffered from retention, for which he was attended by his club doctor. He had retention four times before admission, and on each occasion a catheter was passed. His urine was exceedingly thick, so that, according to his own account, "you could stand a stick up in it." On one occasion blood came away when the catheter was introduced.

Ten days before he came to the hospital he had a rigor, which lasted half an hour.

On admission he was found to be the subject of phimosis. The end of the penis was acutely inflamed, very œdematous, and displayed one or two blackish sloughy points. A muco-purulent discharge issued from the urethra. His urine was passed very frequently in gushes and had a highly ammoniacal odour. It was tinged with blood, had an alkaline reaction, and a specific gravity of 1012, and contained a trace of albumen, epithelium, blood, lithates, phosphates, and pus. He had little, if any, suspicion that he was the subject of a serious affection of his urinary organs. His belief was that he would be well in a day or two, but his aspect belied it. His countenance wore a very anxious expression; his lips were covered with herpetic spots; his tongue was dry, brown, and coated. He was thirsty and feverish. Pulse 120. Temperature 101·6°. A No. 6 silver catheter passed by the house-surgeon, Mr. Beech, into the bladder was so firmly gripped that it could not be rotated. On its withdrawal a clot of blood issued from the urethra, followed by a mass of yellow gelatinous matter. He was ordered a warm bath, and he said it "did him a deal of good," as it brought away a quantity of urine and muco-purulent discharge. On further examination I found that the catheter grated over something rough in the urethra beyond the triangular ligament, and with the forefinger in the rectum I detected a hard body just in front of the prostate, not appreciably movable. This was diagnosed as a stone which had escaped from the bladder and become impacted below the urethral canal.

On December 20th Mr. Hutchinson saw the patient with me, and it was deemed advisable to undertake an immediate operation as affording him the best chance of recovery. Accordingly the patient was taken to the operating theatre and placed under the influence of chloroform. The staff was taken by Mr. Hutchinson. I opened the urethra by a median incision, introduced a pair of urethral forceps, and readily extracted a small stone. My fingers passed forwards into the prostate gland, hollowed out by the destruction of its tissue, and, reaching the neck of the bladder, came into contact with some larger stones. Mr. Hutchinson, who also examined the parts with his fingers, remarked that there was "a quarry." The presence of other stones had been indicated by smooth facets on the small stone first extracted; a pair of forceps was introduced, but as the stones were large, it was found necessary to enlarge the wound in the urethra. Then I extracted the stones in quick succession, washed out the bladder, and introduced a sponge-tube. The mucous membrane of the bladder appeared to be much thickened. There was very little hæmorrhage during the operation—none afterwards.

On the following day (Dec. 21st) the patient appeared to be much better, and expressed himself as comfortable and free from pain. He had had a good night, and was sanguine of a speedy recovery. The tongue was still dry and brown; the pulse about 130; temperature 100·5°. Some urine passed by the natural route.—22nd: Much better, and thought he could eat some chicken and oranges, which were ordered accordingly. Had slept well during the night. Bowels opened freely. The tenderness over the hypogastric region which had existed before the operation had disappeared. Urine passed through the penis. Pulse 130; temperature 100·5°.—23rd: Had passed a good night; said he could eat more. Urine still thick, some coming through penis and some through tube. Pulse very quick and weak; temperature 100° to 102°.—24th: Tube removed. Not so well. Had passed a good night, but perspired a good deal, and a profuse purulent discharge issued from the urethra; mouth very dry and parched; countenance anxious; pulse could scarcely be counted; temperature 102° throughout the day. In the afternoon he rallied, took his food again, and had a long sleep.—25th: Not nearly so well; had a disturbed night; breathing quicker and shorter; pulse still very small and rapid; countenance anxious with rather a vacant stare. In spite of the urgency of his condition he ate a hearty dinner at one o'clock. During the afternoon he became worse, and died at 11.55 P.M.

He had no rigors after the operation. He was sick once soon after it was over, possibly from the chloroform, and once the next morning. The other symptoms were fully explained by the condition of the urinary organs found after death.

Necropsy.—On opening the abdomen Dr. Sutton said that the peritoneum had a greasy appearance, and pointed out a red congested line on the edge of the intestinal coils, especially apparent in the upper part of the abdomen. These he regarded as indications of impending peritonitis. There was not, however, any trace of effusion into the peritoneal cavity, and the peritoneum covering the back of the bladder and the front of the rectum retained its natural lustre. The bladder was contracted. Its mucous membrane was much thickened, highly pigmented, and of a bluish-black colour with here and there whitish patches as if due to the deposit of phosphates from the urine which had been loaded with them during life. The muscular tunic was thickened. The prostate was hollowed out into a ragged cavity containing purulent matter, the floor of the urethra and the veru montanum being destroyed. Some pus was found in the fascia bounding it on the left. The left ureter was very much dilated, about three-quarters of an inch in diameter, and opened into the bladder by a wide orifice in the centre of a large papillary eminence which projected into the bladder, and apparently resulted from chronic thickening of the mucous membrane and the muscular fibres connected with the duct. The mucous membrane lining the ureter and pelvis of the left kidney was thickened and the seat of pigmentary deposit. The pelvis of the left kidney was much dilated, and the infundibula and calyces could be traced outwards, forming a number of culs-de-sac encroaching on the cones. These pouches and the

FIG. 1

pelvis itself were full of thick gelatinous, muco-purulent matter. The cortex was in a state of atrophy. The right kidney presented in a minor degree appearances similar to those in the left. The cortex was contracted, two of the cones obliterated and muco-pus was found in the pelvis and calyces. The right ureter was only slightly larger than the left. The lungs were much congested and emphysematous. The pericardium was healthy. The left ventricle was firmly contracted. The brain was healthy. The annexed wood-cut (Fig. 1) will show the size of the calculi. Their united weight on removal was two ounces and three-quarters. In each of the large calculi there is a nucleus of urate of ammonia mixed with a large proportion of oxalate and urate of lime. Upon this is deposited phosphate of magnesia and ammonia containing a small quantity of phosphate of lime. The outer layers consist chiefly of phosphate of lime alternating with thin layers of urate of ammonia. The central portion of the large calculi resembled in appearance, structure, and size the small calculus. The exact similarity of structure shown by the calculi may possibly indicate that all the four larger ones were formed simultaneously. The calculi are in the museum of the Royal College of Surgeons of England.

Remarks.—A noteworthy feature in the foregoing case is the slight amount of constitutional disturbance and local

pain or discomfort occasioned by the calculi. They must have been in the bladder for some years; and it was not till the smallest one descended, entered the urethra, caused destruction of the prostate and ulceration of the urethra, that sufficient inconvenience was occasioned to necessitate admission into the hospital. There was no evidence of the patient ever having been sounded, or the existence of calculi suspected by his previous medical attendants; and he was admitted in a most precarious, and, as the issue proved, a hopeless condition. The kidneys had already been greatly damaged and the secreting structure spoiled by backward pressure and chronic inflammation, and an abscess had formed in the pelvic fascia outside the disorganised prostate gland. Had the calculi been found a few months earlier, in all probability a fatal result might have been averted. As the case stands, the death cannot in anywise be attributed to the operation, which was in every way beneficial. It placed the patient in a condition of comfort and ease, although unavoidably it came too late to be of permanent advantage.

(To be concluded.)

CASE (UTERINE) ILLUSTRATING THE ACTION OF DIGITALIS AS A DEPRESSO-MOTOR.[1]

BY J. GORDON BLACK, M.D. LOND.

WE are all no doubt agreed as to the great value of digitalis as a cardiac stimulant and contractor of the arterioles, and in materially increasing the blood-pressure in all parts of the circulation. Probably no day passes without our feeling thankful for the aid which this useful drug affords when various little peculiarities of its action are thoroughly understood. As a depresso-motor, however, having a special power over the inhibitory reflex ganglia of the spinal cord, I fancy digitalis is not so generally employed. About twenty years ago, I remember seeing cases of delirium tremens treated with large, or what one may call depresso-motor, doses of digitalis. For example, half an ounce of the tincture would be given several times during the day or night, and had an excellent calming effect upon over-excited nerves and exhausted reflex centres. No doubt this method of administration is familiar to all; but judging from my own experience such a use of the drug is more occasional than common. Perhaps there is a latent dread of untoward effects, and thus one prefers to use the more familiar bromide of potassium or hydrate of chloral to control the disordered reflex manifestations. The following case seems happily to illustrate the power of digitalis, even in comparatively moderate doses, to stimulate exhausted inhibitory centres.

About two years ago I was sent for, late one night, to see a young married lady, staying in lodgings with her husband. Before reaching the house I heard shouts and screams, which I was told emanated from the patient. I found her in bed, throwing her arms and limbs about in a state of the wildest maniacal excitement. At the top of an unusually loud voice she was ordering her husband, or the maid, to get her beer, brandy, or morphia by turns. Had it not been for one symptom which arrested my attention in the act of walking across the room to the bedside on my entrance, I should certainly have felt inclined to ascribe the appearances before me to alcoholic excess. The emphatic signal which, however, at once awakened all my medical sympathies was that of well-marked risus sardonicus—the ghastly grin of the baboon, with the angles of the mouth drawn downwards and outwards, as if by tightened cords. Here was, therefore, no ordinary case of drunkenness or alcoholic mania, but one in which the fountains of the nervous system were seriously implicated. But for this invaluable hint the diagnosis, amid the incongruous surroundings of the sufferer, would have been a labour indeed like unravelling the Gordian knot. Hysteria there was of the most pronounced character. The patient had been addicted for upwards of two years to the hypodermic use of morphia. It had been originally ordered by a medical man for the relief of severe hypogastric and inguinal pain. There was now hardly half an inch of space down the outer side of one lower limb, from the hip to the ankle, where the morphia needle had not penetrated. She even boasted of her skill in operating without leaving a mark on the skin.

Such was my introduction to a very uninviting and apparently hopeless case. The utter degradation and loss of moral restraint in a woman, whom I afterwards found to be a lady of delicate sensibilities and proper conduct, could only be appreciated by actually looking "on this picture and on that." The patient was about twenty-nine years of age, and had been married ten years. She had been twice pregnant within the first two years of married life, but miscarried on each occasion at about the eighth month. The menses had always been regular up to four months ago, since which time they had not appeared. To make a long story short, I discovered that the whole train of symptoms in this case depended upon complete retroversion and flexion of the uterus, which organ was literally upside down, with an acute flexion about the site of the inner os. During the first twelve months of my acquaintance with this confirmed invalid the following forms of hysteria presented themselves at various times to my notice: double wrist-drop, so that splints down the arms were necessary to support the useless hands; loss of power to flex the body upon the lower extremities (she was thus unable to raise herself in bed from the lying into the sitting posture, and although she could sit when placed in a chair, by no effort could she stand up); intense salivation, with swollen gums and tongue, accompanied by horribly fetid breath; absolute aphonia for many days, followed by very considerable paralysis of the muscles of inspiration, the latter at one time being so serious that quantities of mucus collected in the bronchial tubes and trachea, causing the patient much anxiety from fear of impending suffocation; finally, the occurrence of an attack of catarrhal croup of unmistakable character.

Now, in this case, the only drug which seemed to possess power enough to control the disturbed action of the nerves and the maniacal symptoms was morphia. Under its soothing influence she was indeed happy and reasonable. So soon, however, as its effect had passed off she became a raving lunatic, disturbing night and day the neighbourhood where she lived, and for whom the appliances of a madhouse were devoutly desired by her medical attendant. Other medicines, such as the bromides, hydrate of chloral, chloroform, belladonna, quinine, tincture of iron, &c., were next to useless. I never knew bromide of potassium, even given in large doses, prove so utterly powerless. The patient was by no means a dipsomaniac; but, at times of excitement, alcohol was too freely taken in order to drown the sensations of nervine horror which enthralled her. To this end, however, it was only very partially successful; perhaps a little more so than the medicines just enumerated. Immediately on rectifying the malposition of the uterus, complete relief to the most distressing symptoms was attained. Whenever the womb was straightened and duly erected into a normal attitude, by means of a Graily Hewitt's stem pessary, the patient became a reasonable, controllable being, however outrageous her previous conduct might have been. This sequence, as cause and effect, was abundantly verified during the early treatment; for of course at first it was no easy matter to adjust an instrument capable of maintaining itself against the tension of ligaments and tissues contracted by long-standing error. Accidents would occasionally happen, and several times I found that the uterus had actually carried the pessary with it into an inverted position, the point of the stem being vertically downwards, whilst the base of the instrument was wrong side upwards. Under such adverse circumstances, the patient was evidently conscious of something having gone wrong, and very soon afterwards the characteristic risus sardonicus and the dreaded maniacal outbursts supervened, with a horror and thraldom upon her nervous system such as the sight of a spectral appearance might have caused. Under the mechanical uterine treatment mentioned this patient became practically well in the course of six or eight months. She was enabled to throw off the invalidism of several years' standing, and to walk abroad once more.

Thus far I have been obliged to describe this case in order that what follows as to the action of digitalis may be fully understood. About five months ago—that is, a year and a half after my first introduction to the patient, I was sent for

[1] A paper read before the first meeting of the Harrogate Medical Society, Nov. 27th, 1884.

one afternoon, in a hurry, to see her. On arrival, I saw again, to my intense chagrin, the spectral ghastly grin, maniacal rolling eye, and the furtive glance so well remembered; and though, as yet, the shouting demeanour was absent, there was the whispered entreaty for morphia, which she had not used for more than eighteen months. As if this were not discouragement enough, I discovered, upon vaginal examination, that the stem pessary which she continued to wear was not this time out of order. It was in perfect apposition, and erect in attitude. Independent of the treatment by pessary, nothing but morphia had been found able to moderate the violence of these outbreaks; and the employment of morphia I had rigidly forbidden on account of its pernicious effects on her constitution, moral and physical. The day was far advanced and night coming on, with the prospect of the household being turned into a veritable pandemonium. On casting about for some cause for this unpleasant return of her tormentor, I learned that the menses had been rather suddenly stopped by a chill. The left inguinal region was tender to the touch, whilst the left ovary, per vaginam, was felt to be swollen, and the slightest pressure over it was acutely painful to the sufferer. Here, therefore, appeared to me sufficient cause for the nervine disturbance. At least, careful inquiry could suggest no other. Whilst standing by the bedside, watching the vagaries of the patient, in a thoroughly crestfallen mood, the idea of digitalis suddenly struck me. How it was known to stimulate Setschenow's inhibitory ganglia at the upper part of the spinal cord, and, further, its sometimes happy effect when boldly administered in delirium tremens, recurred to my mind. The patient's pulse, too, was at all times high and feeble; but during hysterical paroxysms was even alarmingly so. Digitalis, therefore, being a powerful cardiac and vascular stimulant, seemed very appropriate. The result is soon told. I prescribed half an ounce of the tincture in a four-ounce bottle, with water; two tablespoonfuls (one-drachm dose of the tincture of digitalis) to be taken every hour. This was at five o'clock, and I did not see her again till between nine and ten o'clock. She was then quite calm and reasonable; a perfect contrast to her previous state. The four doses had all been taken. Previously the pulse had ranged from 120 to 130, and was very feeble in character, even at times difficult to detect. Now, on the other hand, it was steady and full, beating rather over 90 to the minute. On other occasions morphia alone had been able to break through the persistent sleep vigil; on this, however, the patient declared she felt drowsy and thought she could go to sleep. This result was happily realised, and an excellent night passed. Next morning she awoke refreshed, got up, and said she was quite well. Better still, she has remained so to the present date.

I would remark, in conclusion, that this case seems to teach a useful lesson regarding the value of digitalis employed as an alternative to agents such as hydrate of chloral, bromide of potassium, nitrite of amyl, Calabar bean, and others so generally used as controllers of disturbed reflexes. These otherwise useful agents tend unfortunately to weaken the heart's action and lower the circulation generally. In poisonous doses they arrest the heart in diastole, whereas digitalis, similarly administered, stops the heart in systole. Digitalis also slows the cardiac beat, whilst it increases the force and efficiency of the contractions. In suitable cases, then, we would do well to remember that these most useful therapeutic powers of digitalis are united to others equally potent and valuable, which give control over reflex nervine disturbances. The result of careful experiments appears to establish that this influence over the reflex centres, as well as over the spinal cord generally, is really independent of the characteristic effects upon the heart and the blood-vessels. The latter potentiality, however, may not improbably assist the former; consequently, where long courses of the bromides and other depresso-motors are found necessary, a combination with digitalis is suggested, to avoid any weakening of the circulation liable to be produced by the former agents. In this direction the character of the pulse will be found a proper guide, for, when full and strong, digitalis will not be needed; but, when feeble and frequent, such assistance would be evidently indicated. There are, on the other hand, occasional instances where medicines commonly relied on and found most useful as sedatives to spinal irritation, have failed; and in such, as in the case I have related, digitalis may happily prove invaluable as the last arrow in the quiver of the long-suffering medical attendant.

A NOTE AND A QUESTION ON SO-CALLED SURGICAL SCARLET FEVER.

BY HERBERT W. PAGE, M.A. CANTAB., F.R.C.S.,
SURGEON TO ST. MARY'S HOSPITAL.

"OUGHT an operation to be performed on a patient whom we know to have been recently exposed to the contagium of scarlet fever?" is a question which cannot very often have presented itself to a surgeon; but it occurred to myself not long ago in the following circumstances.

On Dec. 13th, 1884, I admitted into St. Mary's Hospital a patient with suppurating glands and old sinuses in the right groin, the result of over-exertion, and perhaps general ill-health. On Dec. 13th the sinuses were freely laid open under an anæsthetic, the operation being a somewhat severe one of its kind. On the 18th the temperature rose, and a red rash appeared on the chest and abdomen. This was followed by sore-throat and general extension of the redness, and no doubt was entertained that the patient had scarlet fever. He passed through a mild course of this disease and desquamated over the whole body; but there was little or no arrest in the healing of his wound, and he was discharged from the hospital in eight weeks. He was an intelligent well-educated man, aged twenty-eight, formerly an officer in the Navy, and had been taken into the hospital for special reasons. He was quite unaware of having been exposed to recent contagion, but was sure that he had had scarlet fever twice before, the last time seven years ago.

There attended on this patient a night-nurse and a day-nurse, both lady probationers in the hospital. On Dec. 27th the night-nurse, aged thirty-five, began with scarlet fever, and passed through a typical yet very mild attack. On Jan. 7th the day-nurse, E. P. G——, aged forty-seven, called attention to the fact that her left breast had been for some time very painful and was growing rapidly in size. I was asked to see her, and learned that for the last fifteen years she had had a small painless lump in the breast, that it had begun to increase in size nine months ago, and that for the last two months its growth had been much more rapid, with a considerable amount of pain. The breast was found enormously enlarged, and to be the seat of a tumour which, both from the history and the feel, was obviously a cystic adeno-sarcoma. I advised removal as soon as possible—that, at any rate, it should not be delayed beyond a week or ten days. On the following day her friends took her to see Sir James Paget, who further advised that she should leave the hospital for a few days before operation, so as to lessen the risks of her contracting scarlet fever, to infection from which she had been continuously exposed for the last three weeks. She had never had scarlet fever before. Accordingly, she left the hospital at once, and returned on the morning of Jan. 14th, on which day I had the advantage of talking over the case with Sir James Paget, who agreed in thinking that it was right, in the circumstances of the breast disease, to operate, although the chances of the patient developing scarlet fever were very considerable. On the afternoon of Jan. 14th I removed the breast under full antiseptic precautions, Listerian carbolic spray and gauze. The wound healed by first intention; and from that moment to her discharge from the hospital, on Feb. 9th, her temperature never rose above the normal. She did not contract scarlet fever.

Such is the bare statement of the facts, and it will be acknowledged, I think, that a question of unusual difficulty was submitted to the surgeon before operation. The fortunate issue of the case gives at any rate one answer to the question, that an operation may be performed with safety on a patient who has been recently exposed to the contagium of scarlet fever. Operations have doubtless been frequently performed without ill results on persons who have been so subjected to infection, although that fact was unknown both to themselves and the operators. I question, however, if an operation other than one of real urgency ought to be undertaken knowingly in like circumstances, and I must own that for some days after the operation on E. P. G—— my anxiety was not small that she would show evidences of the fever. The necessity and urgency of the operation had to be weighed against the risks of developing scarlet fever, and had any facts been at hand to tell that the patient would certainly show symptoms of this fever after operation, that there was, in fact, no possible escape for her from such a

consequence, then perhaps it would have been right to postpone the operation longer, urgent though it was. But who could say for how long? There were no such facts to guide me, and I thought it justifiable to take the chance and do the operation.

The history of these three patients clearly shows how different is the susceptibility of different individuals to the poison of scarlet fever. The man who had had scarlet fever twice before gets a third attack within four days of an operation; from him one nurse soon catches the disease, and the other nurse, who was subjected to no less risks of infection and who had not had scarlet fever before, not only does not acquire it, but even undergoes a serious operation within a week of the time when she had been nursing him. It appears, therefore, that an operation, or the state of depression induced thereby, has not that power which has been attributed to it of permitting the development of scarlet fever in a patient who has been exposed to it, unless the patient has also a certain measure of susceptibility to the disease. Nor do I know how this is to be gauged, unless it be from the age of the patient and the absence of any previous history of scarlet fever. It is improbable that anyone can have reached middle life without having been at some time exposed to the risks of infection, and in the system of every individual there must be something to determine whether poison or system shall prevail, whether the poison which has entered in shall run its course, or be deprived of its potency and cause no symptoms. That different persons and different families show all degrees of susceptibility is of course well known, and the history of these three cases seems to point to individual susceptibility as having an all-important share in allowing the development of scarlet fever after operation. How widely different, for example, must have been the susceptibility in the man and in his nurse. This conclusion seems, however, to teach that an operation ought not to be undertaken in such circumstances as have been recorded unless there be some good reason for believing that the patient's susceptibility is only small. The question which begins this paper can, as has been said, very rarely present itself to a surgeon, and I can only suggest that when it occurs very careful inquiry should be made into the history of the patient and his family, that his age be noted, and the probabilities of his exposure to contagion, and his escape from its dangers during his previous life, be fully considered. And yet his previous escape may render him more liable to an attack now, and an operation may be the one thing needful to make him fall a victim to the fever. Not necessarily so, as the case in this paper shows; but there must be a risk, and it should be fairly put before the patient and his friends. Risk unavoidable; attack by no means inevitable; hope of escape well-grounded or the reverse, according to the age and previous history. These are the considerations which must be put before them, and which must be balanced against the measure of the urgency for the operation. How difficult it may be to arrive at a right conclusion is self-evident.

In a letter to me on the issue of this case Sir James Paget writes: "I wish we could have more of these negative facts; we have nothing to weigh against the positive evidences of the bringing out of previous infection." It is with the object of recording a negative fact of much interest and importance that I venture to publish this note.

NOTES ON

A CASE OF ABDOMINAL SECTION.

BY C. A. BRODRIBB, M.R.C.S.

MRS. F——, aged forty-one, a widow with six children, was about her household work, in her usual health, on May 24th, 1884. The next day she was seized with severe pain in the abdomen, with constant vomiting. The pain seemed most severe in the right lumbar region, over the ascending colon. She said she felt that "something had given way in her inside." I was sent for in the evening of the next day (the 26th). I found her in great pain, frequently retching; pulse 108, weak; skin moist and cool. I ordered her to take fifteen minims of tincture of opium in an ounce of chloroform water every four hours, to suck ice, and to apply warm flannels over the abdomen. The next day (27th) she was much the same, but an indistinctly defined swelling over the ascending colon had appeared, extremely tender to the touch. On the 28th I asked Dr. Bagshawe to see her with me. The swelling was more defined, pain intense, but very little vomiting. Pulse 108; temperature 99·5°. No motion and no flatus had passed since the illness began. Ordered half a pint of warm oil with a quart of warm water, as an enema; twenty minims of tincture of belladonna every four hours; extract of belladonna to be applied over the tender swelling, which now had a sharply defined edge below, ending upwards indistinctly. The enema washed out a little fæces and flatus. Dr. Bagshawe thought that the ascending colon had become strangulated by adhesive bands of lymph. So matters continued for the next two days; no motion or flatus passed, and the swelling became more distinct and more tender. On May 31st the case was obviously almost hopeless if left to itself, and it was plainly unwise to wait until the patient became feverish or collapsed. Mr. Travers also kindly saw the case on the 31st with Dr. Bagshawe and myself, and we all agreed that the only chance lay in abdominal section, with a view to release the strangulated bowel. Accordingly, that afternoon, Mr. Travers chloroformed the patient, and having rinsed my hands and the sponges in a little carbolic acid and water, I made an incision in the median line, about five inches long, from just below the umbilicus downwards. I carefully stopped all the little bleeding vessels by torsion before I opened the peritoneum, which I did, of course, upon a director. I then introduced my hand, and passing it on to the ascending colon, I found it surrounded by adhesions of recent lymph, which I easily broke down with my forefinger. I also found a distinct band of lymph transversely across the bowel, and I managed to get my finger under it and broke it. I then drew the bowel sufficiently towards the incision to be able to get a glimpse of it. It was deeply congested, but sound. I afterwards squeezed onwards the contents of the swollen gut, especially one or two hard scybala, and left it soft and gurgling. I found some little difficulty in preventing the bowels from protruding *en masse* through the incision, but with a little more care I was able to close it securely with two deep silver-wire sutures through the peritoneum and four superficial sutures of silk. I dressed the wound with a little piece of lint soaked in carbolised oil, and then put over it a good-sized pad of wadding, with strapping, and six yards of wide calico bandage. I then gave half a grain of morphia under the skin, and ordered nothing but ice by the mouth. The same night the patient passed flatus per anum, but towards morning she had frequent and copious stercoraceous vomiting; temperature 97°; pulse weak. I gave drachm doses of brandy every two hours, and she rallied, and took a little of Brand's essence of beef. For the next two days she continued to improve, and passed flatus freely; lost all pain and swelling in abdomen. On June 3rd she had a large enema, which gave copious relief; wound healthy and healing well. On the 4th she had a relapse, with pain in the epigastrium and temperature 102°, which I attributed to a small slice of roll injudiciously given by a visitor. However, this attack subsided, and on the 5th (six days after the operation) the bowels acted freely of their own accord, the temperature fell to normal, and the pulse improved. On the 6th I removed the sutures, as they caused a "pricking" pain, and I found the wound all healed by first intention. I continued of course to support it with strapping and bandage. I gradually improved the diet, and on the 7th the patient sat up. She is now (seventeen days after the operation) weak, but able to go downstairs, and is practically quite well.

The points of interest to be noted in this case are: first, the rarity of the operation itself in private practice, as it is generally only resorted to as a forlorn hope; secondly, the favourable result, without any special advantages, such as hospital treatment and nursing and antiseptic precautions. The cottage in which the patient lives is one of a row of little houses in a crowded part of the town not particularly clean, airy, or well drained. The operation itself presents no particular difficulty, and requires no great skill in the operator; and this case seems to show that the dangers of abdominal section have hitherto been somewhat over-estimated; and that elaborate antiseptic treatment (which cannot well be obtained at the homes of the poor) is not necessary. Cases of intestinal obstruction are sadly common in the practice of all medical men, and are almost always fatal. I venture to hope that my professional brethren may be encouraged by this case to endeavour to save life in such cases by operation when other means seem likely to prove of no avail.

I must not omit to add that my best thanks are due to Dr. Bagshawe and to Mr. Travers for their kind advice and assistance, and also to the good ladies connected with a church in the neighbourhood who so tenderly and skilfully nursed the poor patient day and night until she was well out of danger.

Hastings.

CASE OF MYXŒDEMA IN A WOMAN AGED SEVENTY-SIX.

BY C. W. SUCKLING, M.D. LOND., M.R.C.P.,
PHYSICIAN TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

L. L——, a woman aged seventy-six, was admitted into the workhouse infirmary on November 12th, 1884. Before I saw her the nurse of the ward told me that another case of myxœdema had been admitted, she having had one, which proved fatal, for twelve months under her charge. On hearing the patient speak I at once recognised the similarity of her mode of utterance and tone of voice to those of the other patient above mentioned, and it was in this way that the nurse detected the disease. No family history of importance could be elicited, and no history of trouble, want, or excess in any way could be obtained. She had been employed for years as a washerwoman, but lately had been too feeble to work. She complained only of coldness of the feet and weakness of the legs. She had had eight children, no miscarriages. She is a big, stout woman, with a heavy fatuous expression, the complexion is sallow with a circumscribed flush on each cheek. There is puffiness above and below each eyelid which does not pit on pressure. The nose is large and broad, and the alæ nasi thick. The lower lip is thick and protruded and somewhat cyanosed. There is hair on her upper lip and chin. The teeth are nearly all gone, the tongue and uvula large. The appetite bad. The skin is harsh, thick, dry, translucent, scaly, and wrinkled. She never perspires. Her limbs are large and there is a general œdema which does not pit on pressure, except in the legs and feet, where it does so slightly. There are thick swellings resembling fat above each clavicle. The hair is very scanty. The thyroid body cannot be felt although the rings of the trachea can be distinguished down to the sternum. The heart sounds are feeble, the pulse regular, small, feeble, and infrequent, 48 per minute, and there is certainly cardiac debility. The respiration is slow (13 per minute). She complains of a sensation of coldness in her feet, also of tingling, numbness, and formication in the hands and feet. Perceptions of pain and touch are retarded; localisation perfect. The pupils are unequal; they respond to light and accommodation. The hearing is very defective. Taste and smell normal. The reflexes are normal. She is slow in her movements, and fumbles in dressing herself; her gait is slow, with short steps. There is no agoraphobia or pain in the head. The speech is slow and drawling, and exactly resembles that of the other cases I have seen. Her intelligence appears fairly good; the memory is defective. She is slow of perception, and takes a considerable time to appreciate and answer a question. The temperature is below normal, ranging from 95° to 97° F. The urine averages forty ounces daily, contains no albumen, and its specific gravity is 1010. The percentage of urea estimated by Squibb's process is 1·15 per cent. For the last few days she has suffered from diarrhœa. She is very quiet and placid, and has had no fits or attacks of excitement.

This case is the third one of myxœdema that I have had under my care. All three have been women—two of them about the climacteric period of life. Two have proved fatal after being under observation for several months. In both of these fatal cases there were convulsions, shortly preceding death, which was by coma. In one of them delusions and attacks of temporary excitement occurred. In all the temperature was low, the urea diminished, and the heart feeble and slowly beating. In one of the fatal cases a gradual slowing of the pulse began two or three days before death, a few hours before death being 20 per minute, the patient at the time being comatose. No albumen could be detected in the urine examined shortly before death. Two of the patients were sisters. One of the patients fractured her patella; this was probably accounted for by the toneless condition of the extensor muscles of the knee, allowing the knee to give way suddenly, and the effort to recover herself fracturing the bone. I have tried jaborandi, nitro-glycerine, iron, arsenic, and baths in these cases without any appreciable benefit to the patient. The prognosis, in my experience, is of course very grave, the patient at any time being liable to a fatal coma. Dr. Oliver, in a clinical lecture on Myxœdema, called attention to a pause between inspiration and expiration as long as the sound of inspiration itself. This has not been present in the cases I have seen. West, however,[1] describes alterations in the respiratory murmurs, and says that Cheyne-Stokes' breathing has been observed in this disease. Many case of myxœdema have now been published, but I cannot find any case approaching in age this one.

Birmingham.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas at morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

A CASE OF FACIAL CARBUNCLE; DEATH; NECROPSY.

(Under the care of Mr. HOLMES.)

THE following case is a good example of the more severe variety of the disease known as facial carbuncle, death occurring as in the majority of these cases, which are happily uncommon, from pyæmia. No decisive opinion has been arrived at by the profession as to the exact relationship between this disease and true carbuncle, some considering it as the same, modified by position, others considering it to be allied to phlegmonous erysipelas. It will be observed that, in the case recorded phlebitis of the facial and other veins was noticed, preceding the more marked symptoms of pyæmia. In the diagnosis of this disease it is important to remember its resemblance in some respects to malignant pustule.

For the following notes we are indebted to Mr. H. W. Allingham, late house-surgeon:—

Bessie J——, aged twenty, single. Family history: Father died of bronchitis at a good age; other members of the family are alive and healthy. She had always had bad health, being very anæmic, and suffering from amenorrhœa. For this she had been to Eastbourne, and had only returned about a week previous to her admittance into hospital. On Dec. 23rd she complained of some pain in the left side of her upper lip, and noticed it to be very red on its inner aspect. Hot fomentations were used, but the swelling increasing a doctor was consulted, who ordered a poultice to be applied. Deriving no benefit from this treatment she was brought to the hospital.

Dec. 27th.—On admission she appeared very anæmic, the temperature being 105°; pulse 140. On the left side of her face, at the angle of the mouth, involving more of the upper than the lower lip, was a large reddish-blue indurated mass, about two inches in circumference; on this were six yellow points, from which pus could be squeezed. The rest of the side of the face was swollen, being hard and brawny, with neither sense of fluctuation nor œdema; upon this were two or three small boils scattered about. This swelling extended from the eyelids, which were thickened and closed, down to the angle of the jaw, and spreading slightly down the neck. Stimulants were given and five grains of sulphate of quinine every four hours.

28th.—The lip was still of a darkish hue, and more yellow points had made their appearance, those dotted about the cheek being very pronounced. Streaks were apparent, following the course of the facial vein and its branches, which felt like cords, being evidently due to phlebitis. The eyelids were more swollen; sordes on the teeth; tongue moist, but very dirty; skin dry. The patient was slightly delirious at night and complained of intense headache. Mr. Holmes made an incision about an inch in depth along the lip at the junction of the mucous membrane and skin, but only a little venous blood (no pus) came from the wound.

[1] Boston Medical and Surgical Journal, vol. ii., page 50.

Temperature, morning, 104°; evening, 102°. Pulse in the morning, 140; evening, 136. Six ounces of port wine and five ounces of brandy were taken during the day, and an injection of a third of a grain of morphia was given at night.

29th.—The patient seemed much worse; the lip was bluish-black and in a sloughing condition; inflammation of the facial vein was still more marked; the eye was prominent and immovable, with a slight hæmorrhage under the conjunctiva on the outer side. The boil-like prominences about the cheek presented black sloughs on the surface. Tongue dry. Temperature, morning, 103°; night, 104°; pulse, morning, 156; evening, 140; respiration, morning, 52; evening 60. Some signs of pneumonia appeared in the left axillary line. About 6 P.M. she was delirious, having slight tremors of the right arm and leg, which continued up till 11 o'clock, when she died.

Autopsy.—The brain was soft and congested; the superior longitudinal, lateral, and cavernous sinuses, and left ophthalmic veins contained a dark, soft clot, friable, and in some places yellow and semi-purulent. A purulent disintegrated clot filled the entire length of the external and internal jugular veins. The pleuræ contained some fluid, and both visceral and parietal layers were covered with soft recent greenish lymph. The cut surfaces of the lungs were deeply congested; in the centre of the left were numerous scattered foci of suppuration, from the size of a sago-grain to a pea. The bronchi were congested and filled with frothy fluid. The liver, spleen, and kidneys were congested. There were no internal hæmorrhages or peritonitis.

RADCLIFFE INFIRMARY, OXFORD.

A CASE OF ATAXIC ARTHROPATHY: REMARKS.

(Under the care of Dr. BROOKS.)

W. C——, aged forty years, who works on a steam threshing machine, was admitted into the Radcliffe Infirmary on February 25th, 1885, with symptoms of œdema of the left leg, together with considerable effusion into the left knee-joint. He is an intelligent man and gives a clear concise account of his illness up to the present date. Two months ago he first noticed a swelling of the left knee, which gradually became larger and larger until it attained the present size. The swelling of the knee had been preceded by pains in both lower legs, which were of a gnawing character. These pains had been present at intervals for between two and three years. During the time the knee was swelling he did not suffer any pain in the joint, nor was it at all red or tender. When he bent his knee in walking he observed that there was a crackling sound produced in the joint. He noticed that his legs as he lay in bed would give occasional spasmodic jerks. Shortly after the knee began to swell he found that he could not walk steadily in the dark, but he considered that this was due to the condition of his knee-joint, which had made his leg somewhat weak. He, however, had not any difficulty in getting about during the day with the help of a stick. He had not felt any abnormal sensations in his feet, and could distinguish by means of his feet the character of the ground on which he walked. For six years he had been in the army, during which time he had not had occasion to go into hospital, although he had served three years and a half in Jamaica. He had not been subject to gastric crises. No history of syphilis could be elicited. From the nature of his work he is much exposed to the weather.

On admission the left knee and the upper two-thirds of the lower leg appeared considerably larger than the corresponding parts on the right side, the measurement over the left knee-joint exceeding that over the right knee-joint by two inches. The swelling at the joint consisted of a large quantity of fluid in the synovial membrane; the lower end of the femur and the upper end of the tibia were slightly and uniformly enlarged. The joint did not present any abnormal redness, and its temperature was the same as that of its fellow of the opposite side. The joint was quite smooth, and there were not any irregular nodules of adventitious bone. There was partial luxation of the joint inwards and backwards. There was considerable semi-solid œdema of the left leg below the knee-joint. On moving the joint loud crackling was heard, which was in fact perfectly audible to people two or three feet from the patient. The movement of the joint caused no pain whatever, even when the ends of the bones were forcibly approximated. The posterior surface of the patella when rubbed against the anterior surface of the femur felt rough. The ligaments of the joint, especially the capsular ligament, were very lax, and allowed the finger to be thrust into the joint between the ends of the bones. Lateral movement would be produced when the leg was extended. The patient could stand perfectly steady, with his feet together, and without any support, as long as his eyes were open. He walked with a firm step when allowed to spread his feet well apart from one another, so as to form a broad base for his body, and did not exhibit any incoördination that could not be accounted for by the state of the knee-joint. When he turned, he required some space to get round in, and was slow and awkward in executing the movement. When standing with his feet together and his eyes closed, coördination was distinctly less than normal, and he swayed considerably. On trying to walk along a line on the floor, his movements became markedly incoördinate. It was found that coördination was less interfered with when his boots were on than when his feet were bare. Patellar reflex was absent on both sides. Muscular power was unimpaired, and tactile sensation normal. The pupils were unequal, and did not respond to light. Accommodation could be readily performed, and was accompanied by contraction of both pupils. Sight was good both for colours and for type. By the ophthalmoscope it was seen that the discs were pale, but no distinct optic nerve atrophy was present. The control over the bladder and rectum was perfect. Since admission the œdema of the leg has become less marked, and there is slightly less synovial fluid in the joint. The crackling heard on moving the joint has gradually disappeared. The ligaments of the joint are very lax, and allow more movement than on admission. The incoördination, on standing with the eyes shut, remains as it was on admission.

Remarks by Dr. BROOKS.—The case is a good instance of ataxic arthropathy as described by Charcot.[1] The joint attacked is the one most commonly diseased in locomotor ataxia. The tumefaction of the joint first attracted the patient's attention and caused him to seek advice, but it is not possible to say how long the patellar reflexes had been absent before this. There was not any traumatic or other cause for the disorganisation of the joint. The arthropathy has occurred, as is commonly the case, between the prodromic and incoördinate periods of the disease. The presence of the Argyll-Robertson phenomenon at this stage of locomotor ataxia is in accordance with the statistics given by Gowers in his paper before the Ophthalmological Society.[2] One curious point I am at a loss to account for is the fact that coördination is more perfect when the patient has his boots on than when his feet are bare. The tumefaction of the joint, according to the patient's account, was much more slowly developed than in many of Charcot's cases.

CHILDREN'S HOSPITAL, NOTTINGHAM.

A CASE OF MENINGOCELE; OPERATION; DEATH; NECROPSY; REMARKS.

(Under the care of Dr. LEWIS W. MARSHALL.)

C. B——, six weeks old, was admitted on January 30th, 1884, with a large tumour on the back of the neck, said to have existed at the time of birth, but on admission very much increased in size. The description given by the mother was as follows: It was about the size of an egg at birth, and hung to the scalp at the back of the head; white in colour, turning to a bluish tint. At the end of a week it was larger and red in colour. Some fluid escaped at a fortnight old. The tumour, as seen by Dr. Marshall, was as large as an orange, spherical in shape, attached by a short thick pedicle an inch long to the scalp at a point corresponding to the occipital protuberance, and hanging backwards on to the shoulders. The swelling could be lifted away from the skull, and no reduction in size was effected by pressure. It was soft, fluctuating, translucent, and resembled in appearance a spina bifida. A white broad line ran across the tumour from before backwards. There appeared to be no connexion between the posterior fontanelle (which was open) and the swelling. Pressure produced no ill effects upon the child. Its general health was good; there was no history of "fits" or squinting. The child was fed by the mother's milk, which was taken well.

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after securing the pedicle by an old pile clamp, with screws at either end. When the cyst was emptied of its contents (clear limpid serum) the growth was removed by the knife. The edges gaped too much for a continuous suture to be used, and three harelip pins with twisted sutures were passed through, with the double object of approximating the edges and preventing the clamp slipping off. In the centre of the cut surface a small channel was found, which admitted the end of a fine probe down to the point of compression by the clamp. The middle harelip pin was made to transfix the walls of this channel before passing out again on to the skin surface. The total quantity of fluid withdrawn was six ounces. On examination the tumour was found to be a meningocele, the membranes being collected into a rope-like body at the pedicle, with the small channel above referred to in the middle. There was no oozing of fluid or bleeding after the operation. The stump was washed over with boroglyceride.

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14th.—Left the hospital. The mother lived in the country, and unfortunately missed her omnibus, and the child was therefore exposed much longer than was necessary on a cold day.

18th.—The child was brought into hospital, the mother having noticed twitchings of the face and limbs the night before, and the breast was refused. 5 P.M.: Had a convulsion; medicine returned to, every three hours. The child was placed in a dark room and fed with mother's milk by a spoon.

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27th.—Died to-day, having slowly and steadily become worse.

Necropsy.—The wound nearly healed. On removing the scalp an opening, half an inch in length by a quarter of an inch at its broadest point, was found three-quarters of an inch behind the posterior fontanelle, communicating with the interior of the skull, but closed by membranes which were welded together into a rope and attached to the cerebellum, a portion of which was torn away on removal of the brain. On cutting through the parietal bones the left lateral ventricle of the brain was opened, and a large quantity of fluid escaped. The surface of the brain was coated with lymph, and showed everywhere evidences of recent inflammation. Both lateral ventricles were very much distended, the left markedly so. The fluid in the left ventricle was clear, that on the right side was opaque and milky. The third and fourth ventricles were distended with fluid, and their boundaries softened and disorganised.

Remarks.—In this case there appeared to be legitimate grounds for adopting, with a fair prospect of success, the measures suggested by Mr. Holmes in his Surgical Diseases of Children, although these means had not, at the time his work was written, been put to the test by him. From the symptoms there was no evidence of existing internal hydrocephalus; but this condition is stated to be usually present to a greater or less degree in all cases. There was clear evidence of the absence of brain matter, and that the channel of communication with the inside of the skull, if one existed, was small. The child's general health was also exceptionally good. A tubercular history was made out on the father's side, yet not pronounced. In any future case with the same favourable prospect, the operation as done here might again be attempted with a different result.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Excision of Cerebral Tumour.

AN ordinary meeting of this Society was held on Tuesday last, Dr. George Johnson, F.R.S., President in the chair. Great interest was manifested in the proceedings, though there were but few who joined in the discussion.

Dr. HUGHES BENNETT read a paper on a case of Cerebral Tumour, the surgical treatment of which was managed by Mr. Rickman J. Godlee. The chief features of interest in this case were, that during life the existence of a tumour in the brain was diagnosed, its situation localised, and its size and shape approximated entirely by the signs and symptoms exhibited, without any manifestations of the growth on the external surface. This growth was removed by a surgical operation without any immediate injurious results on the intelligence or general condition of the patient, who lived relieved of his former symptoms for four weeks, and who at the expiration of that time died, not from any special failure of the nervous centres, but from the effects of a secondary surgical complication. The case, however, taught important physiological and clinical lessons, and suggested practical reflections which might prove useful to future medicine and surgery. In the communication the history and condition of the patient on examination were detailed. The diagnosis arrived at was stated with the reasons for the same. The surgical operation and subsequent treatment were described with comments thereon. The progress of the case, its termination, and the post-mortem reports were recorded. Finally a commentary was added in which all the important clinical, physiological, and pathological points of interest were discussed. (For further particulars of this case, *vide* THE LANCET, 1884, vol. ii., p. 1090, and p. 23 of the current volume.

Dr. HUGHLINGS JACKSON congratulated Dr. Hughes Bennett on the accuracy of his diagnosis. The operation Mr. Godlee performed showed that Dr. Bennett was right in saying that a cerebral tumour might, so far as the operation itself goes, be safely removed. The patient, most unfortunately, died, but he died of a secondary surgical complication. Dr. Hughlings Jackson also warmly congratulated Dr. Ferrier from whose valuable researches the tumour was localised. Speaking more generally of localisation of cerebral tumours with regard to trephining, Dr. Hughlings Jackson said that there was a kind of monoplegia, often passing into hemiplegia, which was almost certain evidence of cerebral tumour; a paralysis beginning very locally, for example, in the thumb and finger and spreading very slowly week by week. In such a case he should not advise trephining, since there would be great probability of a large tumour in the centrum ovale, not certainly, for he had seen such hemiplegia in a case of tumour of the dura mater pressing down on the cortex. The convulsive seizures of localising value were not cases of epilepsy proper, but epileptiform seizures, convulsions beginning one-sidedly and only locally in the hand, cheek, or foot. Whilst these seizures pointed with certainty to disease of the opposite cerebral hemisphere, they did not always occur from such gross disease as tumour. In some there was local softening. When, however, there was also double optic neuritis, such gross disease as tumour might be confidently predicted. Even yet there is not evidence of exact position. Dr. Hughlings Jackson had not yet seen a case of epileptiform seizure caused by disease outside Ferrier's motor region. But such cases were recorded by great authorities, so that, repeating in effect what Charcot and Pitres had urged, we required also some local persisting paralysis of the part convulsed—persisting, since temporary paralysis after a seizure was no further help towards localisation. So far, then, three things were required: local persisting paralysis, epileptiform convulsion, and double optic neuritis.

Temperature, morning, 104°; evening, 102°. Pulse in the morning, 140; evening, 136. Six ounces of port wine and five ounces of brandy were taken during the day, and an injection of a third of a grain of morphia was given at night.

29th.—The patient seemed much worse; the lip was bluish-black and in a sloughing condition; inflammation of the facial vein was still more marked; the eye was prominent and immovable, with a slight hæmorrhage under the conjunctiva on the outer side. The boil-like prominences about the cheek presented black sloughs on the surface. Tongue dry. Temperature, morning, 103°; night, 104°; pulse, morning, 156; evening, 140; respiration, morning, 52; evening 60. Some signs of pneumonia appeared in the left axillary line. About 6 P.M. she was delirious, having slight tremors of the right arm and leg, which continued up till 11 o'clock, when she died.

Autopsy.—The brain was soft and congested; the superior longitudinal, lateral, and cavernous sinuses, and left ophthalmic veins contained a dark, soft clot, friable, and in some places yellow and semi-purulent. A purulent disintegrated clot filled the entire length of the external and internal jugular veins. The pleuræ contained some fluid, and both visceral and parietal layers were covered with soft recent greenish lymph. The cut surfaces of the lungs were deeply congested; in the centre of the left were numerous scattered foci of suppuration, from the size of a sago-grain to a pea. The bronchi were congested and filled with frothy fluid. The liver, spleen, and kidneys were congested. There were no internal hæmorrhages or peritonitis.

RADCLIFFE INFIRMARY, OXFORD.

A CASE OF ATAXIC ARTHROPATHY: REMARKS.

(Under the care of Dr. BROOKS.)

W. C——, aged forty years, who works on a steam threshing machine, was admitted into the Radcliffe Infirmary on February 25th, 1885, with symptoms of œdema of the left leg, together with considerable effusion into the left knee-joint. He is an intelligent man and gives a clear concise account of his illness up to the present date. Two months ago he first noticed a swelling of the left knee, which gradually became larger and larger until it attained the present size. The swelling of the knee had been preceded by pains in both lower legs, which were of a gnawing character. These pains had been present at intervals for between two and three years. During the time the knee was swelling he did not suffer any pain in the joint, nor was it at all red or tender. When he bent his knee in walking he observed that there was a crackling sound produced in the joint. He noticed that his legs as he lay in bed would give occasional spasmodic jerks. Shortly after the knee began to swell he found that he could not walk steadily in the dark, but he considered that this was due to the condition of his knee-joint, which had made his leg somewhat weak. He, however, had not any difficulty in getting about during the day with the help of a stick. He had not felt any abnormal sensations in his feet, and could distinguish by means of his feet the character of the ground on which he walked. For six years he had been in the army, during which time he had not had occasion to go into hospital, although he had served three years and a half in Jamaica. He had not been subject to gastric crises. No history of syphilis could be elicited. From the nature of his work he is much exposed to the weather.

On admission the left knee and the upper two-thirds of the lower leg appeared considerably larger than the corresponding parts on the right side, the measurement over the left knee-joint exceeding that over the right knee-joint by two inches. The swelling at the joint consisted of a large quantity of fluid in the synovial membrane; the lower end of the femur and the upper end of the tibia were slightly and uniformly enlarged. The joint did not present any abnormal redness, and its temperature was the same as that of its fellow of the opposite side. The joint was quite smooth, and there were not any irregular nodules of adventitious bone. There was partial luxation of the joint inwards and backwards. There was considerable semi-solid œdema of the left leg below the knee-joint. On moving the joint loud crackling was heard, which was in fact perfectly audible to people two or three feet from the patient. The movement of the joint caused no pain whatever, even when the ends of the bones were forcibly approximated. The posterior surface of the patella when rubbed against the anterior surface of the femur felt rough. The ligaments of the joint, especially the capsular ligament, were very lax, and allowed the finger to be thrust into the joint between the ends of the bones. Lateral movement would be produced when the leg was extended. The patient could stand perfectly steady, with his feet together, and without any support, as long as his eyes were open. He walked with a firm step when allowed to spread his feet well apart from one another, so as to form a broad base for his body, and did not exhibit any incoördination that could not be accounted for by the state of the knee-joint. When he turned, he required some space to get round in, and was slow and awkward in executing the movement. When standing with his feet together and his eyes closed, coördination was distinctly less than normal, and he swayed considerably. On trying to walk along a line on the floor, his movements became markedly incoördinate. It was found that coördination was less interfered with when his boots were on than when his feet were bare. Patellar reflex was absent on both sides. Muscular power was unimpaired, and tactile sensation normal. The pupils were unequal, and did not respond to light. Accommodation could be readily performed, and was accompanied by contraction of both pupils. Sight was good both for colours and for type. By the ophthalmoscope it was seen that the discs were pale, but no distinct optic nerve atrophy was present. The control over the bladder and rectum was perfect. Since admission the œdema of the leg has become less marked, and there is slightly less synovial fluid in the joint. The crackling heard on moving the joint has gradually disappeared. The ligaments of the joint are very lax, and allow more movement than on admission. The incoördination, on standing with the eyes shut, remains as it was on admission.

Remarks by Dr. BROOKS.—The case is a good instance of ataxic arthropathy as described by Charcot.[1] The joint attacked is the one most commonly diseased in locomotor ataxia. The tumefaction of the joint first attracted the patient's attention and caused him to seek advice, but it is not possible to say how long the patellar reflexes had been absent before this. There was not any traumatic or other cause for the disorganisation of the joint. The arthropathy has occurred, as is commonly the case, between the prodromic and incoördinate periods of the disease. The presence of the Argyll-Robertson phenomenon at this stage of locomotor ataxia is in accordance with the statistics given by Gowers in his paper before the Ophthalmological Society.[2] One curious point I am at a loss to account for is the fact that coördination is more perfect when the patient has his boots on than when his feet are bare. The tumefaction of the joint, according to the patient's account, was much more slowly developed than in many of Charcot's cases.

CHILDREN'S HOSPITAL, NOTTINGHAM.

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Dr. Hughlings Jackson mentioned the case of a man who had had convulsion and paralysis of one arm; a tumour, a cubic inch in bulk, was found involving the hindermost part of the uppermost frontal convolution. This was before Hitzig and Ferrier's researches; the exact position was not diagnosed. That tumour might probably have been got out with safety, yet there was considerable softening; moreover, there was a tumour in each lateral lobe of the cerebellum, although there had been no cerebellar symptoms. Another case in which a woman had very many convulsive attacks of one arm (later wider seizure was mentioned). In this case Dr. Hughlings Jackson correctly predicted tumour of the hindermost part of the uppermost frontal convolution and adjacent ascending frontal convolutions, but not with the confidence he should have done had Ferrier's researches then been made. The tumour was about an inch in diameter, and, had it been removed, very likely the woman's life would have been saved. She had not double optic neuritis, but, making an exception to a former statement, were he to observe a case of repeated convulsions nearly always limited to one arm, exactly alike at each recurrence, he should, even without double optic neuritis, consider them to be due in all probability to a tumour in the region mentioned. In another case he had diagnosed correctly tumour of the same region, but there were also other tumours in that half of the brain. Admitting difficulties—that the tumour might be very large; that there might be softening about it; that, besides the tumour localised, there might be others,—yet in a case where the tumour was evidently going to kill the patient, when there was intense pain, and when, as sometimes happened, the patient had twenty or thirty fits daily, the patient would consent to risk something, and a surgeon might justifiably operate. Dr. Hughlings Jackson remarked that, after operation in such cases as he had mentioned, there would, he thought, be the serious drawback of some permanent paralysis; but this was little in comparison with the misery of pain, torment, repeated fits, and great danger of death. In conclusion, he said that in a case of convulsion limited to one arm, or beginning in one leg, with some persisting local paralysis and double optic neuritis, he should diagnose tumour or other such gross disease of the upper part of the Rolandic region, and should seek surgical advice as to the propriety of trephining, not forgetting to state prominently the three difficulties mentioned.

Dr. FERRIER congratulated the authors on their success, which was gratifying both to Dr. H. Jackson and to himself. He had watched the case with the greatest interest, and was present at the operation, which was entirely successful; although the patient had been under the influence of the anæsthetic for two hours, yet at the end of that time he became conscious and was able to answer by gesture simple questions put to him by Dr. Ferrier. So that the patient bore the operation without any great shock to the nervous system, and he might say without danger to life, for there could be no doubt that death was due to an inflammatory complication, such as could only come under the chapter of accidents. The operation, if performed strictly antiseptically, need not be attended with any risk of encephalitis. Some authors had said that operations on the brain of monkeys were free from risk of encephalitis, but this was not the case. Monkeys were quite as difficult of surgical management as human beings. If antiseptics be employed inflammation need not result. In his earlier series of experiments on monkeys antiseptics had not been used, and then every animal suffered from encephalitis. During the experiments made with Professor Gerald Yeo, in which both frontal lobes or both occipital lobes, or other parts of the brain, were removed, this was done without any inflammation resulting because antiseptics were employed. He made reference to a case which had been under his care at King's College Hospital, because it illustrated important principles. The patient was a man who for two years had suffered from cerebral symptoms. He was admitted with coma and left-sided paralysis, and suffered from pain in the right frontal region when the coma lessened, as it did at times. The right eyeball was feebler than the left, and he had all the symptoms of cerebral tumour. At his instigation an exploratory operation was carried out by Sir Joseph Lister. The skull was trephined at the right frontal eminence. The frontal lobe of the brain was found to be distended by what at first was thought to be a cyst, but turned out to be the distended lateral ventricle. The knife, passed downwards, led to the escape of a gush of fluid; nothing further was done. The paralysis was relieved and the coma diminished by this procedure, but the patient died eight days later. At the autopsy a new growth was found to spring from the sphenoidal fissure, and had pressed upon the corpus striatum, and so caused the paralysis; the bulging of the eyeball was due to this new growth. This tumour would have been doubtfully removable, even supposing that it had been detected by the exploratory operation; but in order to verify a diagnosis exploratory measures should be adopted, for the disease if left alone would prove fatal. He felt confident that the future would yield more favourable results.

Dr. MACEWEN contributed an account of some cases which had been under his care, and which are being published separately in our columns.

Dr. H. BENNETT referred to the important cases of Dr. Macewen, which had been attended with such brilliant success; yet he considered that his cases were scarcely analogous with the one brought forward; for a limited lesion of the brain had been diagnosed entirely by symptoms, whereas in Dr. Macewen's first case there were other indications to guide the surgeon. Then there was paralysis of a more extensive character than obtained in his (Dr. Bennett's) case. He then exhibited to the Society a brain taken from a patient who had been under the care of Mr. Davy. This patient had been trephined, and from the substance of the cortex as many as eight pieces of bone were removed; the bone had been forced there by an accident. The operation left behind it a large hole in the brain, which would take a pigeon's egg. There were no antiseptics used in this case, and yet the boy made an uninterrupted recovery. Death ensued some time later from acute double pleuro-pneumonia. The autopsy showed no trace of injury to the brain, except a hard dense cicatrix, the site of the former operation.

Mr. V. HORSLEY said that in this last case, which had been done without antiseptics, the conditions were hardly parallel with those which obtained in cases in which the brain had sustained no previous injury. In this case of depressed fracture, no doubt adhesions would be produced all round the injury, and effectually shut off the wound from the rest of the cavity of the arachnoid. Some practical surgical points in experiments and operations on the brain were alluded to. There was no doubt that morphia diminished the tendency to hæmorrhage, and the vigorous welling up of blood from numerous arterioles was seen to a less extent in his and Schäfer's experiments. The morphia was hypodermically injected, about two-thirds of a grain being the dose employed. As to the kind of dressing, he preferred the dry permanent dressing, for he had been astonished to see how rapidly the effused serum was absorbed. In only five out of forty experiments had he aspirated with a view to diminish the tension of the effused serum.

Mr. GODLEE congratulated Dr. Macewen on his successful and brilliant results. He ventured to think that there was not so much hæmorrhage in opening into an abscess cavity as in cutting the unaltered brain. Moreover, he had employed the actual cautery partly no doubt to arrest hæmorrhage, but also with a view of destroying the deeper parts of the tumour, the boundaries of which were indefinite in the downward direction. In his opinion the inflammatory action was the cause of the hernia cerebri; inflammation would probably not occur without some putrefaction having been set up. In removing the deep part of the growth, which appeared to extend downwards in a conical fashion, he had used a Volkmann's sharp spoon, but some instrument rather larger and blunter like a salt spoon would probably have answered the purpose better. Large wounds in man had not in his experience been well treated when the wound was completely closed, and he considered that wounds in lower animals were not perfectly analogous to wounds in man. So that he agreed with Dr. Macewen that a drainage-tube should be used; otherwise there would be no opportunity for an extensive effusion of serum and blood to make its way out. As to the cause of the disaster in his case, he had no doubt that it was due to putrefaction, which was probably the result of imperfect purification of the scalp. He remembered that blisters had been employed in the occipital region, and had not healed; the serum from these sores might have contaminated the wound. At another time he should have the head shaved all over and thoroughly washed first with soap, and then with corrosive sublimate, and finally soaked in a strong solution of carbolic acid.

CLINICAL SOCIETY OF LONDON.

Obstruction of Arteries and Veins extending over many years.—Osteitis Deformans.—Hæmoptysis treated by Artificial Pneumothorax.—Removal of Calculus from Vermiform Appendix.

AN ordinary meeting of this Society was held on May 8th, Mr. Arthur E. Durham, F.R.C.S., Vice President, in the chair.

Dr. B. HADDEN read notes of a case of Obstruction of Arteries and Veins extending over many years. The patient was a healthy-looking man, aged fifty-one. His paternal grandparents had gout. The patient denied syphilis, but there were strong grounds for suspecting past infection. His present disease began suddenly in 1868, when he was seized with a sharp pain in the left foot, said to be gout. Phlebitis of the same leg, with swelling and tenderness of the limb, followed, the attacks lasting five months. In 1880 he came under the care of Dr. Mitchell Bruce for sudden obstruction of the right brachial artery. The radial artery was small, and the heart was irregular. Very soon the radial and ulnar veins became painful and thrombosed. In 1881 he had sudden loss of power in the left arm, but not in the leg. The face was thought to be drawn. There was some mental confusion, but no actual loss of consciousness at the time of the attack. Between 1881 and 1884 he is said to have had several attacks of arteritis and phlebitis. He was admitted into St. Thomas's Hospital under the care of Dr. Stone on Feb. 2nd, 1885. He had pain and tenderness in the right groin, with feeble pulsation of the femoral artery. No beat could be felt in the posterior tibial, but the dorsalis pedis was pulsating strongly. The right internal saphena vein was thickened and thrombosed. There was slight œdema of the foot, and some enlargement of the superficial veins. Pulsation was absent in the right brachial and feeble in the radial. There was a large collateral branch strongly pulsating just above and behind the external condyle of the humerus. There was no enlargement of the superficial veins. There was slight varicosity of the veins of the left leg, but otherwise the vessels were unaffected, as were also those of the left upper limb. On the front of both legs there were pigmented scars, very suggestive of syphilitic disease. The heart was irregular, but there was no bruit and no hypertrophy. The urine was free from albumen. The pain in the right groin persisted for six weeks, without any fresh obstruction occurring. He had two attacks of severe headache localised in the right frontal and parietal regions, but they both passed off without further mischief. The treatment consisted of mercury and iodide of potassium, with hot soda baths and complete rest. He is now free from pain, and is better than he has been for two years. In discussing the case, the author believed there was no evidence that the affection was gout. Possibly it was syphilitic. Two explanations may be offered with regard to the pathological nature of the disease. First, there may be embolism affecting the arteries, and phlebitis; secondly, there may be an inflammatory condition affecting the coats of both arteries and veins. The latter hypothesis seems the most probable, and it is supported by the fact that, although there was great tenderness in the right femoral vessels for six weeks, no fresh obstruction occurred.—Mr. A. P. GOULD referred to the cases (which Dr. Hadden and he had shown during the last session) of obliterative arteritis from which the present case differed very materially, for there was no evidence of affection of the veins. A case which occurred in Billroth's practice had been reported by Dr. von Winiwarter, who had written by far the best account of the disease. In Billroth's case the plantar and digital vessels were first affected, the posterior tibial being involved later, and its companion veins were affected. In the wide extent of the vessels affected, Dr. Hadden's case was peculiar; the disease was limited to one upper extremity in the cases shown last session. As a rule, the progress of the affection was steady and chronic, and attended with pain and some gangrene; the final result was generally a shrunken and colder limb. In Billroth's case the disease lasted a few years, and, although it was not very extensive, it recurred in the foot. In Dr. Hadden's case the obstruction appeared to be more sudden and acute than in the majority of cases of obliterative arteritis. He asked whether the pain was very severe; if it were limited to the vessels or spread over the whole limb; whether the obstruction spread from the smaller arteries up to the larger or in the opposite direction; also, whether the vessels were first felt to be harder and firmer than normal with lessened pulsation and only later on became completely pulseless; with regard to temperature, also, was it raised? as happened in his case; was there much swelling? there was very little of the hand and forearm in his case. Did the patient suffer very much from coldness?—Dr. ANGEL MONEY considered that the interesting case was worthy of inquiry from a neurological point of view. Lewaschew had experimentally shown that chronic irritation of nerves led to inflammatory changes in the walls of arteries. With this view in mind he asked whether there were any symptoms pointing to disease of the nerves.—Dr. HADDEN said that the pain was very severe but limited to the vessels; the disease spread from the large to the small vessels; the temperature was usually normal, but rose somewhat when the localised headaches appeared. There was no marked swelling of the limbs, but a great deal of coldness was complained of by the patient. The man was highly emotional, but he had not suspected a nervous causation for the disease.

Mr. J. R. LUNN read notes of a case of Osteitis Deformans. In St. Thomas's Hospital Reports for 1883, vol. xiii., he had given a full account of a case of osteitis deformans. Since 1876, when Sir James Paget drew attention to the disease, numerous other cases have been recorded. The chief symptoms noticed by the patient are pains of a rheumatic character in the affected limb, loss of height, and in male patients increased size of the head, rendering their hats too small. In a fatal case the morbid process was nearly universal, but the chief stress seems to have fallen upon the bones about the main axis of the body. The absorption and disappearance of the original bone seems to have been the primary event in the course of the disease, and must have taken place, not by a coarse process, but by a very delicate interstitial change. As to the nature of the morbid process which produced the anatomical alteration, the view advanced by Sir James Paget that it is a kind of chronic ostitis has been generally accepted. But, while fully admitting that chronic inflammation may have some share in the process, he did not think that it altogether accounts for the changes found. The conclusion he had come to is that osteitis deformans consists of:—1. A constitutional disease producing atrophy and absorption of a large part of the osseous system. 2. Consequent weakening of the bones, so that they yield when exposed to strain. 3. Compensatory strengthening of the growth of what may be looked upon as a variety of callus. 4. The occasional formation of definite tumours. 5. Fatal cachexia.—Mr. MACNAMARA said that in these cases there were pains of a rheumatic character. He had recently made some observations on the insertion of tendons into bone, and he had found that the tendons were prolonged into the bones; possibly the perforating fibres of Sharpey were such prolongations. The tendons were really portions of bone on this view, and he surmised that the disease might have commenced in the tendons and spread into the substance of the bone.—Dr. F. L. BENHAM spoke of the helplessness of the patients and of their weakness, which might be accounted for by the atrophy of the bones; for the new bone thrown out was obviously a secondary change. He thought there was merely a difference of degree between this disease and osteomalacia.—Dr. THOROWGOOD remarked on the failure of anti-rheumatic remedies to relieve the symptoms of this disease. The administration of small doses of Fowler's solution was followed by marked improvement in his hands. It would be interesting to know the very earliest symptoms of the disease. He had seen cases in which pain in the joint with crackling sensation in passive movement were the main features. Did these cases go on to osteitis deformans?—Mr. WARRINGTON HAWARD referred to the possible occurrence of the disease without any rheumatic pains. In cases that he had seen pain was not a marked symptom; not unfrequently the urine was alkaline and there were no other signs of rheumatism.—Mr. STEPHEN PAGET could not concur in the remarks of Mr. Macnamara, for the chief deformity of the bones occurred in parts away from the insertion of tendons, the skull was enormously thickened in the region of the eminences, and there was bowing and thickening of the anterior surface of the tibia in cases which he had seen. The curves of the arms, clavicles, and spine were influenced by the posture which the patient assumed. Much difficulty of respiration was brought about by ankylosis of the ribs.

Patients die partly from cardiac weakness and partly from the difficulty of breathing. Full mental activity seemed to be retained, and there was no more loss of flesh or vigour than was natural to people of their age.—Mr. J. R. LUNN, in reply, said all his cases had had rheumatic pains. He had submitted the occipital bone and the tumour of the iliac bone to Dr. Sharkey, for histological examination. There was much irregularity in the anatominal structure of the bone; absorption or rarefying osteitis appeared to be the dominant process; the bone corpuscles were not arranged in parallel lines; there was also clear evidence of a formative osteitis. The tumour was cartilaginous throughout, and not sarcomatous. No definite history of the early symptoms of the disease was to be ascertained in the majority of cases. He believed that there was no specific cachexia in the affection.

Dr. CAYLEY read notes of a case of Hæmoptysis treated by the Induction of Pneumothorax so as to Collapse the Lung. The patient, aged twenty-one, a porter, was admitted into the Middlesex Hospital on Feb. 9th. For some time past he had suffered from a slight cough, but otherwise his health was very good. On Feb. 7th he was at work as usual. In the evening he had a sudden attack of hæmoptysis, which recurred the next morning, and again the following night; and immediately after his admission he brought up 4 oz. of florid blood. He considered that he had in all brought up about a pint. Patient was rather pale, but well nourished and of good muscular development. The left side of the chest was flattened in front, and the expansion was much diminished. There was dulness on percussion over the scapular region, and here there was feeble bronchial breathing. The breath sounds all over this lung were very faint, and accompanied by moist râles. These signs were attributed to the lung being clogged with blood. On the right side the physical signs were normal. He was quite free from any feelings of malaise, and his appetite and digestion were good. He had in all brought up upwards of a gallon of florid liquid blood, besides a large quantity of blood-stained sputum. The physical signs over the left front were much as on admission. On the right side rather fine moist râles were now audible in front and in the axillary region. The temperature was usually normal or subnormal in the morning, and varied from 101° to 101·8° at night. The breathing was but little accelerated and tranquil. As it was now evident that much repetition of the hæmorrhage, in all probability due to a pulmonary aneurysm or to the ulceration of a large vessel, must prove fatal, it was determined to induce pneumothorax, with the expectation that the great diminution of the circulation through the collapsed lung, together with the pressure exercised by the air, would arrest the hæmorrhage; and supposing there was active development of tubercle in progress in the lung, this would probably for a time be checked. It was considered that the extreme anæmia of the patient would diminish the embarrassment to the breathing likely to be caused by collapsing one lung. Accordingly, at 6 P.M. on March 10th, Mr. Hulke made an incision in the sixth intercostal space, an inch behind the anterior fold of the axilla, and intoduced into the pleural cavity a double tube, made by uniting together by a shield two pieces of elastic catheter about three inches long. The opening was protected by a small cage, lined with carbolic gauze, and the whole covered by a carbolised gauze bandage. The air passed freely in and out at the time of the operation, and the apex of the heart moved to the mid-sternal region; the respiration became much accelerated. On March 12th it was observed that the breath sounds over the left front had become more audible, and the percussion resonance less tympanitic than after the operation, and the tube was found to be completely blocked; it was accordingly removed, and a silver tube resembling a flattened tracheotomy tube was introduced in its place. The air now passed in and out freely, the resonance became tympanitic, and the "bell sound" could be elicited. The apex of the heart could be felt beyond the right border of the sternum. He afterwards complained of severe pain in the side. The temperature rose to 104·6°, and much serous fluid began to flow through the tube. The following day the tube was removed. On March 14th, though extremely prostrate, he felt better. He continued to spit frothy glairy mucus with pellets of altered blood, but there was no return of the hæmorrhage. On March 15th he was in much the same state. At 2 P.M. he died quite suddenly, apparently from syncope. After death both lungs were found studded with recent grey miliary granules. The right lung was free from any old tubercular disease. In the apex of the lung was a very small old vomica with smooth walls, and some puckering round it. The lower lobe and the lower part of the upper lobe were collapsed, and the pleural surfaces smeared with recent lymph. The pleural sac contained about two drachms of non-purulent fluid. In the lower part of the upper lobe close to the interlobular septum, which was bulged downwards by it, was a cavity the size of a walnut, filled, except at its centre, by a light-coloured laminated clot, so as to closely resemble an aneurysm. In the centre of this clot was a small round cavity containing a little loose black coagulum, and this cavity communicated with a considerable branch of the pulmonary artery. A large bronchial tube opened into the periphery of the pulmonary cavity, but was shut off by the laminated clot from the central space. At the upper part this clot was softer and more recent than elsewhere, and had no doubt recently allowed a communication to take place. The cavity in the lung containing the clot was smooth-walled, but showed no signs of any aneurysmal sac. There was no old tubercular disease around it. As the case turned out to be one of acute miliary tuberculosis, it is evident that no treatment could have availed to prevent a fatal termination. The patient did not live long enough to warrant positive conclusions as to the effect of the operation in arresting the hæmorrhage. He had two slight attacks in the following night, but there was no subsequent recurrence. The necropsy showed that the communication between the false aneurysm and the bronchus was closed, and possibly if the patient had lived complete solidification of the aneurysm would have been effected. Considering how largely the pulmonary circulation is influenced by the respiratory process, and the small amount of blood which flows through a collapsed lung, such a mode of procedure affords a means of arresting an otherwise uncontrollable pulmonary hæmorrhage. Any extensive consolidation of the lung would no doubt, by preventing collapse, be a contra-indication, and would thus restrict the applicability of the operation to a few cases. The probability of exciting pleurisy was, of course, another objection. In this case, notwithstanding careful antiseptic precautions, pleurisy was set up, but it was of a simple non-suppurative form, and but for the tuberculosis would not have added much to the patient's danger.—Dr. THEODORE WILLIAMS thought the case was one of great interest, and he congratulated Dr. Cayley on his courage. Then, as to the utility of the mode of treatment, he considered there were grounds for discussion. In many cases the patients were reduced to the last extremity by hæmoptysis, and yet finally recovered. Derivative treatment was sometimes beneficial. In a case which he had under his care where the hæmoptysis probably proceeded from a vomica, into this vomica he had injected a solution of tannic acid, with the result that the hæmoptysis almost immediately ceased. The sputa later on gave the reactions of tannic acid. What were the advantages to be gained by inducing a pneumothorax which the patient would necessarily carry with him ever afterwards?—Dr. DUFFIN said that the question to be decided was whether the immediate effect was beneficial; the lung was practically reduced to a fœtal condition through which but little blood flowed. He did not think that we need be afraid of the admission of air into the pleura. Physiologically we should expect valuable results to follow the operation. The difficulty was to know when we should be justified in resorting to this heroic remedy.—Mr. R. W. PARKER thought the treatment was rational, but there were ways of causing pneumothorax without running risk from septic agencies. He recommended the injection of filtered and carbolised air into the pleura such as he had advised in the treatment of certain kinds of empyema. A hypodermic syringe with an elastic ball and some carbolised cotton-wool were the only articles required for the operation.—Dr. S. COUPLAND did not suppose that Dr. Cayley would have performed the operation if he had known the precise pathological condition which existed in this case, which was of a remarkably singular character, for there were very few physical signs of pulmonary tuberculosis. The case proved that a large amount of disease of the vessels could occur without any physical signs of disease.—Dr. CHAPMAN thought the case would have been still more interesting if the details of treatment were given. Was the side of the chest compressed and strapped by plaster?—Mr. CHARTERS SYMONDS spoke of the induction of artificial pneumothorax as having been sug-

gested by Dr. Mahomed in a case on which they had held a consultation. The aim of the operation was to be the arrest of phthisis.—Dr. EWART considered that an important departure in the treatment of pulmonary cavities might date from Dr. Cayley's recommendation. The arrest of the circulation in the lung might throw the other lung into such a condition as to lead to hæmoptysis from it. He remembered that some time ago Dr. Douglas Powell had induced artificial pneumothorax for the treatment of a large cavity. The upper lobe of the lung had been almost entirely destroyed, and the cavity in it had been practically obliterated, as the autopsy showed. The lower lobe of the lung was practically carnified; there was an empyema, and aseptic air was introduced as a means of treating the empyema, and at the same time with a view of causing collapse of the pulmonary cavity.—Dr. HADDEN said that the pleura might have been universally adherent, and artificial pneumothorax would be useless if the aneurysm were at the apex of the lung, as this portion would not collapse.—Dr. CAYLEY, in reply, said that every means for arresting the hæmorrhage were tried. There were no physical signs of old pulmonary disease. He thought that the pressure of air and stoppage of the circulation would have an influence on an aneurysm, even though this was in the apex of the lung. The condition of pneumothorax was not necessarily a serious matter. A patient, the subject of a wasting disease, required less area for breathing purposes than a man in sound health.

Mr. CHARTERS SYMONDS read a paper on a case in which, at the suggestion of the late Dr. Mahomed, he had removed a Calculus from the Vermiform Appendix for the relief of Recurrent Typhlitis. The following are the chief particulars of the case:—Charles S——, aged twenty-three, a basket maker, was admitted into Philip ward, Guy's Hospital, under the care of Dr. Mahomed, July 16th, 1883. The patient had typhoid fever a year ago. The report of Mr. Vernon, the clinical clerk, says that "six months ago (January, 1883) he was seized during the night with pain in the right iliac region; this increased in severity and he became ill generally, and at the end of a week was unconscious, remaining in this state four days. The illness lasted seven weeks. During the first week he vomited everything, and his bowels were not opened for ten days. During the whole time there was great tenderness in the right iliac fossa. On getting about, he noticed a hard lump in the right groin about the size of a walnut; sometimes this swelling was painless, at other times it was very tender. Since this illness he has had repeated attacks of pain in the right iliac fossa, which come on suddenly and last one or two days. The pain is relieved by poultices. At first these attacks recurred about once a month, but during the last five weeks he has had six attacks, and they have been increasing in severity." On admission there was to be felt in the right groin on deep palpation a small hard lump about three-quarters of an inch by two inches running parallel with Poupart's ligament. There was slight tenderness on pressure. The man was placed on a fluid diet, and was soon relieved of all his pain. Dr. Mahomed considered fully the question of operation, and proposed that the cæcal region should be approached by an incision in the right iliac region, as he was strongly of opinion that there existed an abscess cavity containing probably a calculus or concretion, and that the periodical occlusion of a communication with the cæcum determined the recurrence of pain. One of the attacks had been observed in the hospital, and was accompanied by an increase of the swelling, which also remained dull on percussion. Mr. Symonds thought a peritoneal adhesion constricting the last portion of the ileum might explain the periodic attacks, as he had seen a somewhat similar condition before. As the complaint continually recurred, it was decided to explore the right iliac fossa. Dr. Mahomed planned the operation, and it was on his recommendation that the incision adopted was selected. The lump was oval in shape, could be distinctly felt, but could not be taken hold of. It was well defined and only slightly tender. The most probable explanation seemed that this lump was a concretion; but whether inside the appendix, or resting in a cavity bounded by peritoneal adhesions and bowel, was doubtful. It was therefore decided to cut down upon the lump to remove a calculus present or drain a cavity should pus be found. Chloroform was administered, and under the carbolic spray an incision was made commencing two inches above and one inch internal to the anterior superior iliac spine, and curving downwards and forwards for about four inches, being much the same as that used in ligature of the external iliac, and so arranged that its centre corresponded with the position of the lump. The various structures were divided, but the transverse fascia was not distinctly recognised, owing possibly to the incision being rather near the iliac spine. The structures in front were now raised out of the iliac fossa, when the swelling could be plainly felt from behind, and as yet the peritoneal cavity had not been opened. A hand pressed duly from the front steadied the swelling, and brought it more into the wound. A vertical incision was now made over the hard lump, and a small calculus exposed. Before removing it a fine silk suture was passed through the tissues just above, so that the orifice might not be lost. The opening was then enlarged, and the calculus exhibited removed. The soft and purple mucous membrane of the appendix was seen, and its tortuous course from the aperture could be traced upwards towards the cæcum, so that there seemed no doubt of the canal having been opened. Exploration of the cavity with a probe failed to detect a channel leading towards the cæcum. No pus or other fluid was found round the calculus, nor was there any fæcal or unpleasant odour. The opening into the appendix was closed by Lembert's method, and the wound by deep silk sutures. The peritoneum was not opened so far as could be determined, and this was attributed to the adhesions that had probably taken place at the time of the first attack, and to the method adopted in reaching the appendix. The usual gauze dressings were used. The calculus was oval in shape, smooth on the surface, and measured three-quarters of an inch long, and rather more than half an inch wide. On section it showed a laminated calcareous capsule enclosing hardened fæcal matter.—With the exception of some local disturbance about the wound the patient did well, and was discharged at his own request six weeks after the operation. There remained some induration to be felt on deep pressure, but the wound had apparently healed. During the whole of his stay the temperature never rose above 99·4°. Fearing some further trouble might arise while any lump remained in the iliac fossa, he was directed to return at the first sign of a recurrence of his former symptoms. The man resumed work in a fortnight, and suffered no inconvenience till a month later, when he felt pain in the right iliac fossa, which gradually spread over his abdomen, and became so acute that he was obliged to take to his bed. Two days afterwards he observed a yellowish fluid escaping from the wound. He was readmitted two days later. There was a sinus three inches long discharging a thin yellowish fluid, and the hard swelling noticed when he was discharged. He had improved, and there was to be noted induration beneath the scar, and from here the appendix could be traced upwards. The rounded swelling that had been observed, and which varied in size, had now entirely disappeared. Three weeks after admission he was discharged, the sinus having closed, and the man being in good health. When last heard of (April, 1885), though an inmate in the Barming Heath Lunatic Asylum, he was free from his old disease, and had never had any trouble since Nov. 1883. Mr. Symonds remarked that this is the first case in which a concretion or calculus has been removed from the appendix vermiformis without at the same time the opening of an abscess, and the credit of whatever value rests in the procedure must be given to his lamented colleague, Dr. Mahomed, at whose suggestion the operation was undertaken, and who further advised the inguinal incision in opposition to that in the linea semilunaris proposed by himself. That the operation in this case was justified few will deny when it is remembered how frequently a concretion is found to be the cause of fatal typhlitis. This fæcal concretion was present in eleven out of seventeen fatal cases, in all of which the disease originated in the appendix, either as a sloughing ulcer with a concretion or a sloughing ulcer without a concretion. He mentioned this to exclude tubercular ulcers. This case was so isolated that it was not expedient to attempt to formulate conditions under which we should undertake similar operations. In none of the eleven cases mentioned above was the concretion calcareous. He directed the dissection to the posterior surface of the cæcum and appendix, not because he imagined that under normal circumstances he might avoid the peritoneum, but because here, if anywhere, he would probably meet with adhesions, and so possibly enter a case containing the appendix and concretion shut off from the general peritoneal cavity. After the study of twenty-three fatal cases, and with a knowledge of how

frequently large iliac swellings due to typhlitis disappear, he suggested that some cases at least might be saved by early incision. Such cases are recorded, and success has followed the treatment.

The following living specimens were shown:—Mr. John Hopkins: Two cases of Myxœdema. Mr. Willett: A case of Congenital Enchondromata.

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.

AT the ordinary meeting held on April 10th, Dr. S. C. Smith, Vice-president, in the chair,

Dr. JACOB showed Microscopical and other Preparations from the Intestine and Liver of a case of Tuberculosis occurring in a child aged two years, which had caused death with symptoms of acute intestinal obstruction. The glands were enlarged into great masses completely surrounding and obstructing both the cæcum and one part of the ileum for about two inches. The liver showed microscopically great fatty infiltration and increase of connective tissue. The viscera from this case, freshly removed, were shown to the Society by Mr. Hartley at a previous meeting.

Dr. JACOB also read a paper on "Second Attacks of Scarlet Fever."

Mr. J. J. PICKLES related the case of one mother in three successive pregnancies giving birth to children the subject of Harelip, there being no hereditary tendency or other apparent cause of the deformity.

Professor JESSOP showed a young man with perfect movement of the elbow, on whom he had operated for Ununited Fracture of the Olecranon, by wiring together the fragments. The operation had been done some months previously, up to which time the patient had a useless and weak limb.

Professor JESSOP also showed a man on whom he had operated for Fæcal Fistula, the opening being high up in the jejunum, as shown by the motions being liquid and full of bile. The patient had been stabbed in the abdomen several years before, and had ever since had the fistula, for which he had been several times unsuccessfully operated on. The operation consisted in opening the abdomen, detaching the bowel from the abdominal wall, refreshing the edges of the opening in the gut, which was the size of a shilling and opposite the mesenteric attachment; carefully suturing the edges of the intestine by eleven carbolised silk sutures passed from within and one from without, through all the coats of the bowel; returning the closed viscus and stitching up the abdominal opening as in ovariotomy. Flatus passed after a few hours, and after the second day the temperature continued normal, the man recovering without a bad symptom. —Mr. WHEELHOUSE said that he looked on the case with great satisfaction, since on this very man he had several years ago done every operation he could think of without any benefit. He had not, however, seen the case until some time after the accident, when the fistula was fully established.

Dr. OLIVER read a paper, with demonstrations, entitled "A Contribution to the Clinical Study of the Liver, viewed through the Urine," which, together with a second paper read on May 1st, is in course of publication in our columns.

At the ordinary meeting held on May 1st, Dr. Bell, President, in the chair,

Mr. E. ATKINSON showed a patient, aged twenty-one, who had suffered Compound Dislocation of the Astragalus forwards and outwards in November, 1884. As there was a wound of four inches, the diagnosis was easily made and the astragalus was felt to be firmly fixed to the os calcis. Reduction was effected under ether without division of the tendo Achillis. When the patient was shown to the Society the ankle was somewhat swollen and stiff, but the wound was healed and the man could walk with only a slight limp.

Mr. NEVITT read a paper on Coca and its Alkaloid. After giving an account of the botanical relations of the plant and its use by the native Indians as a stimulant and narcotic, he referred to its use as a local anæsthetic and gave a list of the surgical operations in which it had been used, including cases of hæmorrhoids, fistula, opening mammary abscess, applying arsenical paste to epithelioma, circumcision, irritable conditions of the bladder, lithotrity, vaginismus, toothache, pruritus ani, lichen, eczema, and in numerous operations on the throat and nose. He had used it himself in four cases. 1. The removal of a vascular growth from the female urethra; a 20 per cent. solution being applied on cotton-wool. 2. A case of vaginismus in a newly married woman; the same solution was applied on a pledget of wool, and in five minutes the patient could bear the introduction of a Ferguson's speculum and the application of carbolic acid to two fissures. A vaginal dilator was used frequently, and the patient was enabled in a very short time to return to her husband. 3. He had used it in applying carbolic acid to a fissure of the rectum. 4. In applying nitric acid to a chancroid sore.

Reviews and Notices of Books.

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objects. The work before us is divided into 660 sections, and almost every section is devoted to a description of some staining agent or process, some material for injection, or some mode of mounting. It is in fact a complete repertory of modern methods. It is well remarked by the author that, notwithstanding the great variety of processes recommended, which are, indeed, almost as numerous as the tissues to be examined, a certain system underlies that variety; the system consisting in the first place of fixing the structures to be examined, then staining them with a nuclear stain, dehydrating with alcohol, and, mounting series of the sections in balsam. In accordance with this principle, the majority of preparations are made by fixing, either with sublimate or a picric acid combination, washing out with alcohol, staining with alcoholic borax-carmine, embedding in chloroform-paraffin, cutting with a sliding microtome, and mounting the sections in series in Canada balsam. No microscopist should be without this handbook of the methods of microscopic anatomy, which will supply him with useful information on every subject he may require to know when at his table, and will give him suggestions that he may readily turn to account.

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Die Methoden der Bakterien-Forschung. Von Dr. FERDINAND HUEPPE. Wiesbaden: C. W. Kreidel. 1885.—Modern pathological research has opened up an entirely new field of study, for to be an all-round pathologist nowadays one must be a mycologist also. It is, then, highly necessary that some guidance should be given to those who desire to pursue a study that requires minute observation and most careful manipulation. For this purpose Dr. Hueppe has written a book which covers the whole ground. It is a laboratory handbook, and deals in the first place with the microscopical detection of forms of bacteria with and without the aid of special staining reagents, within diseased tissues and isolated from them. Thence he passes to the next step in all such research—viz., the separation of the bacteria and their cultivation in various media, so important for the detection of specific differences. Then come the inoculation test and its various methods of application. After sections devoted to such subjects as the action of temperature and disinfectants, and the investigation of soil, water, and air, Dr. Hueppe concludes by advocating the formation of bacteriological laboratories in connexion with hygienic institutions. The author has every right to be heard on the subject, and we may be sure that what he says is founded on an extended personal experience.

Darkness and Dawn: the Peaceful Birth of a New Age. London: Kegan Paul, Trench, and Co. 1884.—This is a smartly written little book, containing some fine irony, and wholesome, though sad and sober, truth, dressed in a somewhat Ruskinian garb. Worshippers of the great god Commerce will wince if they read it, and the glorifiers of Trade, as the prime civiliser of the world, will not relish the remorseless fashion in which their idol is demolished. But a revolution, bloodless yet complete, is represented as changing all this. The transformation is inaugurated by a self-denying nobleman, who relinquishes, for the benefit of the State, his possessions, and, his example becoming contagious, the nation of shopkeepers is gradually converted into a real Christian commonwealth, each for all and all for each. Zymotic diseases die out, relentless competition having ceased, the motive for food adulteration no longer exists, whilst all that is noblest and best in human character has full sway. So ends the tale. Gloom, lurid and intense at the beginning, merges into the brightness of a golden age. "So mote it be!"

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

TUESDAY, MAY 12TH.

SIR H. ACLAND, President, in the Chair.

THE PRESIDENT, in opening the proceedings of the Council, said:—The session brings the Council together once more with the same constitution and the same functions to discharge that were assigned to it by Parliament in 1858. It has often been remarked, that so long as this is the case we cannot intend nor even wish to abandon the post of duty so assigned and undertaken. On this head, therefore, no more now need be said. At a later period I shall have to make a single observation on an important question arising from the situation in which we are placed. It was lately my happiness to see the Marquis of Ripon, since he returned from his distinguished administration in India. I reminded his lordship that in the fifteen years that had elapsed since he had endeavoured in vain to consolidate the medical examination arrangements of this country, no action taken in that direction by Parliament had been successful, notwithstanding the sincere labours of successive Governments—labours appreciated and often acknowledged by you. But I was able to add with satisfaction that, nevertheless, education had continuously advanced; that many anomalies had comparatively ceased; and that I sincerely believed that there was, upon the whole, an honest rivalry among teachers and between institutions to carry out, by voluntary exertion, the principles by which he had sought to secure the public good. It had been my wish this year to have taken a brief survey of the education and examination changes which, as I understand them, have taken place in these last fifteen years. But since they are still in transition, I shall confine myself to-day to a short account of the present position of the Council's work, reserving a more complete statement for another occasion. My reasons for adopting this course are these. At the last meeting of the Council instructions were given in three directions, each of which had separately much significance, and are, when taken together, calculated to produce a great effect on the course of medical education. The three were: 1. The revision by the Branch Councils of England, Scotland, and Ireland, severally and separately, of the recommendations hitherto issued by the General Council. 2. No person should be granted a degree, diploma, or licence to practise, registrable under the Medical Act, unless he has proved his competency in medicine, surgery, and midwifery, by passing examinations in those subjects at one or more of the licensing bodies. 3. The inspection of the final medical examinations in all the universities of the United Kingdom. Before we proceed to-day to consider in detail the result of the Council's instructions, it may be well generally to note the effect of these instructions taken collectively and in their complementary relation to a Report which as yet has hardly been fully considered—viz., that on the examinations by the corporations in England, Scotland, and Ireland, by Mr. Teale, Professor Gairdner, and Mr. Stokes. The reports on the recommendations having been circulated among the members of the Council, they will have already observed that the several suggestions of each Branch Council have been printed in parallel columns along with the original recommendations of the Council. The General Council can now compare at a glance these Branch Council suggestions with those of the

frequently large iliac swellings due to typhlitis disappear, he suggested that some cases at least might be saved by early incision. Such cases are recorded, and success has followed the treatment.

The following living specimens were shown:—Mr. John Hopkins: Two cases of Myxœdema. Mr. Willett: A case of Congenital Enchondromata.

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.

AT the ordinary meeting held on April 10th, Dr. S. C. Smith, Vice-president, in the chair,

Dr. JACOB showed Microscopical and other Preparations from the Intestine and Liver of a case of Tuberculosis occurring in a child aged two years, which had caused death with symptoms of acute intestinal obstruction. The glands were enlarged into great masses completely surrounding and obstructing both the cæcum and one part of the ileum for about two inches. The liver showed microscopically great fatty infiltration and increase of connective tissue. The viscera from this case, freshly removed, were shown to the Society by Mr. Hartley at a previous meeting.

Dr. JACOB also read a paper on "Second Attacks of Scarlet Fever."

Mr. J. J. PICKLES related the case of one mother in three successive pregnancies giving birth to children the subject of Harelip, there being no hereditary tendency or other apparent cause of the deformity.

Professor JESSOP showed a young man with perfect movement of the elbow, on whom he had operated for Ununited Fracture of the Olecranon, by wiring together the fragments. The operation had been done some months previously, up to which time the patient had a useless and weak limb.

Professor JESSOP also showed a man on whom he had operated for Fæcal Fistula, the opening being high up in the jejunum, as shown by the motions being liquid and full of bile. The patient had been stabbed in the abdomen several years before, and had ever since had the fistula, for which he had been several times unsuccessfully operated on. The operation consisted in opening the abdomen, detaching the bowel from the abdominal wall, refreshing the edges of the opening in the gut, which was the size of a shilling and opposite the mesenteric attachment; carefully suturing the edges of the intestine by eleven carbolised silk sutures passed from within and one from without, through all the coats of the bowel; returning the closed viscus and stitching up the abdominal opening as in ovariotomy. Flatus passed after a few hours, and after the second day the temperature continued normal, the man recovering without a bad symptom. —Mr. WHEELHOUSE said that he looked on the case with great satisfaction, since on this very man he had several years ago done every operation he could think of without any benefit. He had not, however, seen the case until some time after the accident, when the fistula was fully established.

Dr. OLIVER read a paper, with demonstrations, entitled "A Contribution to the Clinical Study of the Liver, viewed through the Urine," which, together with a second paper read on May 1st, is in course of publication in our columns.

At the ordinary meeting held on May 1st, Dr. Bell, President, in the chair,

Mr. E. ATKINSON showed a patient, aged twenty-one, who had suffered Compound Dislocation of the Astragalus forwards and outwards in November, 1884. As there was a wound of four inches, the diagnosis was easily made and the astragalus was felt to be firmly fixed to the os calcis. Reduction was effected under ether without division of the tendo Achillis. When the patient was shown to the Society the ankle was somewhat swollen and stiff, but the wound was healed and the man could walk with only a slight limp.

Mr. NEVITT read a paper on Coca and its Alkaloid. After giving an account of the botanical relations of the plant and its use by the native Indians as a stimulant and narcotic, he referred to its use as a local anæsthetic and gave a list of the surgical operations in which it had been used, including cases of hæmorrhoids, fistula, opening mammary abscess, applying arsenical paste to epithelioma, circumcision, irritable conditions of the bladder, lithotrity, vaginismus, toothache, pruritus ani, lichen, eczema, and in numerous operations on the throat and nose. He had used it himself in four cases. 1. The removal of a vascular growth from the female urethra; a 20 per cent. solution being applied on cotton-wool. 2. A case of vaginismus in a newly married woman; the same solution was applied on a pledget of wool, and in five minutes the patient could bear the introduction of a Ferguson's speculum and the application of carbolic acid to two fissures. A vaginal dilator was used frequently, and the patient was enabled in a very short time to return to her husband. 3. He had used it in applying carbolic acid to a fissure of the rectum. 4. In applying nitric acid to a chancroid sore.

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General Council, and can readily draw in each case their conclusions. The General Council requested each Branch Council to confer as far as it might deem desirable with the several licensing bodies of its division. They all did so, and the several replies of these authorities are appended to each Branch Report. The English Branch decided that it was desirable to give to some of the teachers in the English schools an opportunity of recording their opinions on the several points raised in the recommendations. There are no fewer than twelve separate medical schools in London only, with about 350 accredited teachers; and in the provinces there are as many as nine schools, with about 250 teachers. The English Branch Council decided not to address officially each school as a whole, but only to write to a few individual teachers. Accordingly a small selection was made, comprising representatives of every subject taught, whether in the larger or in the smaller schools. Seeing the great change that has taken place in the last twenty-five years, not only in the ideas but in the apparatus of teaching, some of the younger as well as the older teachers were applied to. It is not without interest to compare some of these replies with those received by the Committee on Professional Education presided over by Mr. Syme in 1869, together with the Report of the London Teachers' Association, presented by their chairman, Mr. John Simon. In the last twenty years, opinions concerning the administration and teaching in the London and provincial schools have greatly changed. The Council, in thus revising and reissuing its recommendations, has, for two reasons, a delicate task to perform. The Council's recommendations have often been assailed from two opposite quarters. First, by those who believe that great institutions—such, for instance, as the Universities of London, Edinburgh, and Dublin—that have worked honourably, and faithfully, and independently in the past, and have with justice acquired a great name, should be seldom interfered with by this Council, and then only in cases of importance, and not in matters of detail. It has often been said, and with truth, that these recommendations are sometimes framed by narrow majorities, and that they touch on points which had better be left to the experience, the progressive experience, of individual institutions. It is therefore alleged that the recommendations should properly be considered as suggestions, and not as orders; that they should, in fact, be regarded in the light of "moral suasion," as it was called by Mr. Syme, with just a touch of the "moral influence," as it is described, of an ironclad in a neutral harbour. But on the other hand, it is said that the recommendations have no value because they cannot be enforced,—and that for this reason the Council is in a false, and it is even said in a humiliating, position. I venture to make a brief reply to both these criticisms—a reply based on observation, and as simple as it is true. The Legislature did not intend this Council to be mandatory in its action. It did intend the Council to be consultatory and hortatory. It was constituted of persons who were entitled to be consulted and capable of advising. It did not intend to relieve the great institutions for the higher education from the responsibility of their trust, or deprive them of freedom to advance on their own lines. It did direct the Council to ascertain whether these did so act, and to report them if they did not. It did call on the representatives of all these institutions to combine in this Council for national consultative and directing purposes, laying aside here, for the common end, their local aims and prejudices, if they had any, which were out of harmony with the general interest. It is easy enough to ascertain whether, and how far, these several intentions have been fulfilled. At no time in history has it been more difficult to fix a standard of education, general, scientific, or practical. Since the Council has existed, the extent of biological knowledge has increased in an unprecedented way; the foundations of therapeutics, the very conceptions concerning prevention of disease, have been enlarged by observation and experiment, and the course of study and examination has been necessarily widened and become more complicated. It became therefore judicious, if not necessary, to seek separately the matured opinions of the independent authorities in England, Scotland, and Ireland, for the purpose of learning their most recent educational views. It has often been stated that there are real differences in the three divisions of the kingdom, which should be taken into account in framing a general scheme. If so, we might hope thus to learn their nature, and how to allow for them, and we may expect now more completely to harmonise the matter as well as the manner of study and examination. That these observations are not connected with an imaginary difficulty, and that it is dangerous for the Council to issue recommendations which cannot be made orders, will appear when letters from the Universities of Oxford, Cambridge, and Dublin are laid before you and discussed. The next instruction of the Council to which attention may be drawn is "That, in the opinion of this Council, no person should be granted a degree, diploma, or licence to practise, registrable under the Medical Act, unless he has proved his competency in medicine, surgery, and midwifery, by passing examinations in those subjects at one or more of the licensing bodies." An observation was lately made on an official occasion to the effect that the issuing of this recommendation showed the need for the reconstruction of the Medical Council, because the Council could not enforce it. The premises and the conclusion both appear to me equally at fault. It is not certain that practically the Council cannot enforce the recommendations; but if a legal authority desire to do its assigned legal duty, and if it is not enabled by the law to do it, then the law should give the powers requisite for carrying out its intentions. In this case a clause of a few lines would give it. But the Council, if it think fit, is able to represent to the Privy Council that having long since agreed with each Government that has affirmed the principle of its recommendation, and having waited for many years for accomplished legislation on this and on other points, it has advised the licensing bodies to carry out the principle of all the amending Bills in this direction. By combination they assuredly can do so. Indeed, to a partial extent, this has been done by the corporations of Scotland and of England, and there is hope that it will be done also in Ireland. In order to ascertain what is the actual condition at present in regard to the registration of single qualifications, the entries made in the Register for a period of six months have been examined by the registrar. Between the 1st of October, 1884, and the 1st of April, 1885, there were registered 175 persons with a single qualification, and of these 175 only 11 have subsequently registered a second. This constitutes about $\frac{3}{100}$ of the whole number of registrations, $\frac{1}{100}$ of those in England, $\frac{1}{10}$ of those in Scotland, $\frac{1}{100}$ of those in Ireland. Of those in England, 62 had a surgical qualification only, and 113 only a medical one. Some of the statistics concerning students also are noteworthy. One of the most remarkable is recorded in a table by Mr. Miller in the Student's Register of last year—viz., that the number has increased between 1870 and 1884 from 1160 to 1957. The subject of the statistics of the profession will be brought before you by Mr. Marshall. The inspectors whom you directed to be appointed to visit the final examinations of the universities have begun their labours. A calendar has been prepared of all the examinations to be held during the present year, and whatever further information or assistance the visitors may require in each branch of the kingdom will be from time to time furnished from your office. Each division of the kingdom is to be visited by visitors from the other two divisions. The Council is already indebted to the able persons who have undertaken this task, it must be said, wholly or mainly on public grounds. It would not become me to anticipate the result of their inspections. Yet, it should be now borne in mind that when these reports are examined in conjunction with the report of 1881-2 on the corporations, and when both are compared with your conclusions which will appear in your revised recommendations, and with your resolutions as to excluding single qualifications from the Register, there will be a complete body of statement as to the present condition of the pass examinations, their efficiency, or their shortcomings. At least two important questions will remain—the first, how far the Council can or should inquire, not necessarily for criticism, but for information and suggestion, into the means and appliances for education in the several schools, a question so keenly discussed of late in relation to the teaching in this metropolis and the universities; the second, what shall be the relation of the pass examinations and the registration titles, to the higher examination, and the so-called higher titles. It is an open secret that these higher titles differ greatly in their actual value, and that some are of no value at all. Yet they are eagerly sought after. It will be generally admitted that the aspiration of students after a title supposed to be of higher social worth to some extent affects the educational arrangements of this country. It is possible that a committee might elicit information which

would show this kind of disturbance to be an evil either more or less than is supposed. But the agitation to obtain the title of doctor by new channels, or on easier terms by old ones, shows that the students have sometimes a motive other than that of obtaining more knowledge or proving the possession of higher acquirements. I cannot wholly pass by without notice a Bill, introduced into Parliament by Dr. Lyons, Mr. Gibson, and Mr. Plunkett, to enable the College of Physicians of Ireland to register a title not included in Schedule A of the Medical Act, 1858, and to enable universities to register the title of master in midwifery, and master of obstetrics, or master in obstetric science. Nor can I omit to notice the action taken lately by the University of Oxford in the way of utilising the diplomas of surgery of the Royal College of Surgeons rather than institute at present a new surgical title in England. Both actions are useful as calling attention to the vexed question of the real or imaginary evil of numerous qualifications—an evil which would be almost imaginary, supposing that all education and all examinations could be exactly equal. I pass to another topic—that, namely, of the questions which arise under the penal clauses of the Act. Sooner or later these clauses will demand revision. The Council in its early days declared that it had not the duty of a prosecuting body; and on May 24th, 1877, it came to the conclusion that after mature deliberation it saw no cause for the determination then arrived at. Its legal functions in regard to prosecutions are administrative and judicial. Inasmuch as illustrations of this fact will appear during this session, the subject need not here be considered in detail. It is now sufficient to note that there is a tendency to exercise pressure on the Council to undertake criminal inquiries. There is, perhaps, no great willingness on the part of the Public Prosecutor in England to take this work off our hands. On this matter the Council's solicitor has full information at your disposal. Thirteen cases of alleged misconduct by registered practitioners have been referred in the past year to the solicitor. Almost all these cases have been complaints against men professing to be qualified who are not qualified, or men who are qualified but act with unqualified persons either as partners or as assistants. They are usually cases which would, *primâ facie*, justify investigation. The complainants generally desire the Council to take up the inquiry, or to pay their solicitor to do so. Their view is that it is the duty of the Council to undertake prosecutions, even against persons who are not on the Register, as well as to punish proved offenders who are on it. Mr. Farrer has observed to me that though there may be cases in which the Council might properly undertake prosecution, it should not be the rule upon every charge brought before it. The Council are judges with a formidable power of severe punishment without appeal, but they cannot compel sworn testimony; the machinery for hearing cases and sifting evidence is cumbrous, expensive, and involves serious loss of time; and their only sentence, removal from the Register—for they cannot suspend—may be much the same as ruin. It is Mr. Farrer's opinion that offenders should be summoned, when the cases against registered practitioners are so far complete as to be without doubt in the absence of satisfactory explanation. Some of the cases are certainly such as should be brought before the ordinary tribunals. It is much simpler to judge of the professional misconduct in a case that has been tried for some offence according to law, and legally convicted. Several years ago the President of the Board of Trade brought two cases of drunkenness before the Council, and the Council declined to interfere. The Council then thought that it could not undertake to investigate charges of drunkenness. Yet such charges might involve cases of the gravest dereliction of duty—and they, in this instance, did so. But the Council then thought it was a case with which the Government should deal. Perhaps, too, it felt that, grave as the offence of drunkenness is, the only punishment the Council can inflict—viz., removal from the Register, and, in that way, the loss of the civil rights of a profession—is an excessive punishment. I must not pursue the question whether the several corporations have to exercise the same caution, or are under a greater obligation to strike the names of the persons so offending from off the roll of their members. This subject will appear again in the case of a Scottish practitioner, charged at the last meeting with issuing certain newspaper advertisements. Further correspondence on this matter will be laid before you. I have to congratulate you on the approaching completion of the new edition of the British Pharmacopœia, to which Dr. Quain has given so much zealous attention. It would not become me to attempt to describe the value of this work, and the might of Dr. Quain's labour upon it. In conclusion, I wish to express my conviction that the zeal and energy of the rising generation of teachers in our medical institutions are grappling with the advancing mass of biological knowledge in a manner which, if ever equalled, has never been surpassed; and that the chief fear for the ordinary medical student of the end of this nineteenth century is that he will be oppressed by details in many departments of science, which, though important to the expert, the specialist, and the discoverer, and attainable by exceptional men, are an actual source of distraction to the ordinary clinical student in the precious and too brief years of his student life. Whether Parliament will alter the constitution of the Council, whether it will extend its powers, or whether it will leave it still, with enlarged experience and single intention but without more power to do its work, are questions which I leave to others to discuss. In both political parties of the State there are men of energy too great, perseverance too steady, and public spirit too strong, to be daunted by past difficulties, or to be wanting in the will to give us whatever is needed as soon as our institutions have agreed among themselves to work unitedly with the same zeal that they have ever shown for their individual progress and development; for no political party is able to destroy the independence of institutions while they fulfil their function according to the true idea of a State. But if they do not, or if they are victims of internal dissension, neither party will refrain from seeking to substitute for their old independence the growing force of rigid State control.

MR. MARSHALL, in moving that the address be entered on the minutes, said he had never heard an address from the chair which contained more important and weighty matter.

DR. HUMPHRY seconded the motion, which was agreed to.

The Finance Committee having been appointed, the following members of the Council were elected by ballot on the Executive Committee:—Sir H. Pitman, Mr. Simon, Dr. Haldane, Dr. Humphry, Dr. Quain, and Dr. Aquilla Smith.

A table was received showing the results of professional examinations held in 1884 for qualifications granted under the Medical Act by the bodies named in Schedule A.

A table was received showing the number of exceptional cases that occurred during the year 1884 under Clause 20 of the Council's Recommendations on Education and Examination, together with a statement of the action taken thereon by the several licensing bodies.

A table was also presented showing the results of preliminary examinations in 1884, compiled by the registrar from such returns as had been supplied by the examining bodies.

DR. HAUGHTON moved that the table be referred to a committee. He called attention to the fact that several bodies had sent no information to the Council on the subject, and said he thought that the returns should be sifted in committee before being considered by the Council.

The motion was seconded and agreed to.

The usual returns from the Army and Navy Medical Departments were received and ordered to be entered on the minutes.

A table was received showing the results of professional examinations in 1884 for qualifications granted under the Dentists Act; also a communication from the College of Preceptors showing the results of the preliminary examinations of the College in March last.

DR. PITMAN called attention to the circumstance that the returns from the College of Preceptors showed that there was almost every year a larger percentage of rejections.

DR. HAUGHTON said it appeared from the returns that out of 317 students only twelve had passed in mechanics, a circumstance that seemed, he thought, to indicate that there was something in the case of mechanics which the regulations of the Council had failed to reach.

A communication was received in regard to the case of a registered practitioner against whom a complaint had been forwarded to the General Registrar by the Branch Council for Scotland. The Branch Council urged the importance of having the case ready to be dealt with at the present meeting of the Council. The Council deliberated on the subject in private, and were so engaged during the remainder of the sitting. It subsequently transpired that the Council resolved, while sitting in private, that Daniel Sutherland be

summoned to appear before the Council on Tuesday next, and also that the name of George Washington Evans be removed from the Medical Register.

WEDNESDAY, MAY 13TH.

Sir HENRY ACLAND, President, in the Chair.

A communication was read from the secretary of the Royal College of Surgeons of England, stating that the diploma of member of the College issued to Mr. Ebenezer Bryceson on April 26th, 1884, had been declared to be void, and that he had ceased to be a member of the College in consequence of it having been proved that before his admission to the final examination he produced forged certificates of professional study.

On the motion of Mr. MARSHALL, seconded by Mr. SIMON, the qualification of Mr. Bryceson as member of the Royal College of Surgeons of England was ordered to be erased from the Register.

Dr. HUMPHRY stated that Mr. Bryceson appeared on the Register as a M.B. of Cambridge University, but as far as he (Dr. Humphry) knew, he had never taken that degree.

The REGISTRAR said that when Mr. Bryceson came to the office he produced what purported to be a document evidencing his qualification, and he filled up the usual form with his name and address as a M.B. of the University of Cambridge.

Dr. HUMPHRY said he would bring this matter before the Council to-morrow.

A letter was read from Dr. J. Wyllie, secretary to the Royal College of Physicians, Edinburgh, stating that at the quarterly meeting of that College, on Nov. 4th last, Bentham Paynter Morison, licentiate of the College, had been deprived of all his rights and privileges as a licentiate, he having been convicted in the Supreme Court of Adelaide, South Australia, of conspiring to cheat and defraud the Australian Alliance Insurance Company, and sentenced to one year's imprisonment with hard labour. At the same meeting of the College similar action was taken with regard to Thomas Robert Horton, who had been convicted in Adelaide of conspiring to cheat and defraud the Australian Mutual Provident Society, and sentenced to two years' imprisonment with hard labour.

On the motion of Dr. HALDANE, seconded by Dr. HERON WATSON, the qualifications of Mr. Morison and Mr. Horton as licentiates of the College of Physicians, Edinburgh, were ordered to be erased from the Register.

Dr. HERON WATSON drew attention to the fact that in October last it was decided that Mr. Horton's qualification as licentiate of the Royal College of Surgeons, Edinburgh, should be removed from the Register, but it still appeared.

The REGISTRAR said that it had been erased from the manuscript register kept in the office, and it was simply a printer's error that it still appeared in the printed book.

On the motion of Dr. HERON WATSON, seconded by Dr. HALDANE, Mr. Horton's name was ordered to be erased from the Register.

Communications were read from the Registrar-General of Wellington, New Zealand, stating that Francis Goold, registered as member of the Royal College of Surgeons, England, 1853, had been erased from the New Zealand Medical Register in consequence of his having been convicted of felony at Auckland on Dec. 2nd, 1876; and that the name of Lloyd Davenport Parry, registered as licentiate of the Royal College of Surgeons, Edinburgh, 1871, had also been erased from the New Zealand Medical Register, in consequence of his having been convicted of manslaughter, and sentenced to four months' imprisonment in the public gaol at Dunedin. It was decided to refer these cases to the Royal Colleges of Surgeons of England and Edinburgh respectively.

A letter was read from Mr. Farrer (solicitor to the Council), stating that Daniel O'Hara, alias Owen Patrick O'Hare, had been condemned to ten years' penal servitude for levying black mail.

The REGISTRAR stated that he had received an extract from the *Liverpool Mercury* of May 9th, from which it appeared that Mr. O'Hara had committed suicide in Walton Gaol, by hanging himself with a towel.

The Council resolved to await further communication from their solicitor before coming to any decison on this question.

Some correspondence was read between the Executive Committee and the Irish Branch Council. A resolution was adopted by the Executive Committee on Jan. 23rd, 1885: "That in the opinion of the Executive Committee it is desirable that the several Branch Councils should contribute the funds required for carrying on the business of the General Council at such times as they may be required to do so by resolution of the Executive Committee." In answer to a communication to that effect, the registrar of the Irish Branch Council had written, stating that at a meeting of that branch on March 24th it was resolved: "That this Branch Council are not prepared to forward the funds at such times as they may be required to do so by resolution of the Executive Committee."

Sir HENRY PITMAN said that it was quite time that some better arrangement should be made with regard to the funds which were provided for the payments of the expenses of the Council. When he was appointed one of the treasurers he found that there was no money whatever to deal with. No account stood in the bank in their names, and very little money was received during the year on behalf of the Council. It was therefore rather an anomaly to have two treasurers. In the returns presented to the Houses of Parliament for the year ending Jan. 1st, 1884, the contributions by the English Branch Council to the General Medical Council appeared as £1682, by the Scotch Branch Council £636, and by the Irish Branch Council £473, but those contributions were never furnished. Every year they were returned as facts, but they were not so; it was evidently an irregularity. It was really a debt due, and he had no doubt that the Irish and Scotch Branch Councils might be trusted to pay the amounts at their convenience, but they did not do so during the year. On the other side of the account, the cash balance in the bank in favour of the Scotch Branch Council was £900, less due to the English Branch Council £636, which was credited as having been paid during the year before. The expenditure of the General Medical Council amounted to £3014 5*s.* 7*d.*, and the receipts out of which the treasurers had to pay that amount were £221 14*s.* 8*d.* Even that £220 was not in the treasurers' hands in the beginning of the year. It was derived from the sale of Registers and Pharmacopœias, &c., so that the treasurers started with the liability of the rent and expenses of the office. Some of the members of the Council would recollect that there had been occasions when there had been no money to pay their fees at the conclusion of a session, the Branch Council not having sufficient funds in hand, and the members had to wait for their cheques. The English Branch Council were not bound to advance £3000 a year for the General Council's expenditure. This, however, was too delicate a matter to be dealt with in the Council, and he therefore proposed: "That the communications with the Irish Branch Council be referred to the Finance Committee, and that the Finance Committee be requested to submit to the General Medical Council a scheme which will render it unnecessary in future that the Branch Council for England should advance the money required to meet the current expenses of the General Medical Council." In dealing with the national funds, the Chancellor of the Exchequer at the beginning of a year provided for payment of all his accounts, and he did not see why the Council could not do something of the same kind. Why could not the Finance Committee make a forecast, and say, "During the year we shall want so much." Each Branch Council would then pay its proportion, and the General Council might open an account at the Bank of England, from which it could draw its money to pay expenses.

Dr. HAUGHTON seconded the motion. He considered that the present relations with the Branch Councils were most unsatisfactory. The only fault he found with the Executive Committee was that they had not enough knowledge of the English language to use the right verb. If they had "requested" instead of "required," the difficulty might have been settled at once; but he allowed no man to "require" him to do anything. It was, however, quite reasonable and proper that the Irish Branch Council should advance the money, and they were quite willing to do so.

Mr. MACNAMARA reminded the Council that some years ago a committee, of which he was chairman, strongly recommended that all the money of all the Branch Councils should be given to the General Medical Council. The English Branch Council objected to that, because at that time they had a large sum of money; but one-half of it lawfully belonged to the Irish and Scotch Branch Councils, because it was derived from registering in London degrees conferred in Ireland and Scotland. Many years ago the grievance was ventilated, and in some cases the English Branch Council

was called upon to refund the money to the other Branch Councils.

The resolution was agreed to.

A letter was read from the Secretary of State, requesting information as to "upon what conditions foreign doctors are allowed to practise in England." The information was required by the Danish Minister.

The Registrar was directed to forward to the Secretary of State the clauses of the Medical Act bearing upon the subject.

Communications were laid before the Council from the India Office, the Army Medical Department, and the Navy Medical Department, relating to returns which the Council had asked for.

On the motion of Dr. STRUTHERS, seconded by Dr. HAUGHTON, the Registrar was directed to thank the Secretary of State for India for his communications, and to state that a return applying to the examinations for the Indian Medical Service held in London, similar to that furnished to the Council by the Army Medical Department, would be satisfactory to the Council.

Mr. MARSHALL moved: "That a committee be appointed to superintend the preparation of statistical returns relating to the medical profession of the United Kingdom; that the committee be empowered to expend on these investigations such sums as may be sanctioned by the President and Treasurer." There were, he said, several subjects which might be usefully considered by the proposed committee, as to which the Council had full information in its possession; and nothing would render the proceedings of the Council more valuable than complete statistical returns with reference to those subjects. One of them was the question of waste and supply in the profession, with regard to which opposite opinions had been expressed. Another related to the career of medical students; and a statistical return on the subject, like that made by Sir James Paget with reference to the career of a thousand students at St. Bartholomew's Hospital, would be both interesting and useful. The duration of study was also a matter of interest, as to which statistical returns could be made by the Council; and the results might show whether fresh legislation was necessary. Another matter for inquiry was the question of single qualifications, and the number of persons taking additional qualifications. So far as the present partial statistics went, it appeared that there had been a gradual reduction of single qualifications from 26 per cent. to about 14 per cent., but more complete information on the subject was required. Other questions would also suggest themselves to the committee as fit subjects for statistical returns, and he thought that a good deal of useful information would result from their labours. The expense of the inquiry would be slight, and the Registrar would be able to render valuable assistance in its prosecution.

Mr. SIMON seconded the motion, which, he said, had his cordial support and sympathy.

Dr. STRUTHERS asked if Mr. Marshall had any controversial object in view in his proposal, and suggested that the subject should be postponed until a more definite statement was made of the nature of the statistics proposed to be obtained. He also thought that the committee, if appointed, should be a larger one than had been suggested. A committee of three would be too small.

Dr. HAUGHTON supported the motion, and said he thought that the proposed statistics would prove very interesting to the profession and the public. The discretion of the committee might be trusted as to the particular subjects of inquiry.

Dr. DUNCAN also supported the motion, but wished to have the opinion of the treasurers as to whether the expenditure involved would be a legitimate one.

Sir H. PITMAN said, if it could be shown that the inquiry was for the purpose of the execution of the Medical Act, the expense would be perfectly legitimate.

Mr. MACNAMARA supported the motion, and suggested as a subject of inquiry the question where students have been educated with reference to where they have been registered. The result, he thought, would be surprising, and would show how it was that the English Branch Council was so rich, and that the Irish and Scotch Branches were so poor.

The PRESIDENT pointed out that the work of statistical returns had been well begun by the Registrar, and would no doubt be usefully extended by the proposed committee.

The motion was agreed to.

On the proposal of the names of the committee—Mr. Marshall, Dr. Haldane, and Dr. A. Smith,—

Dr. STRUTHERS again urged that the committee should be larger; but, after a short discussion, withdrew the suggestion, and the committee was appointed.

Communications were read in regard to the General Medical Council's amended regulations for the preliminary examinations of medical students from the University of Dublin, the University of Oxford, the University of Cambridge, and Queen's College, Cork.

Dr. HAUGHTON said that the letter from the Dublin University had been carefully considered, having been drawn up by himself and amended by the provost of Trinity College. It would be seen that the University peremptorily rejected the mode of teaching and examining in mechanics proposed by the Council, and said that they were not prepared to alter their method, which they regarded as superior to the one which the Council had recognised. None of the bodies had given a more hearty support to the Council than the University of Dublin when it saw that the proposals of the Council were an improvement on existing methods, and it was still willing to recognise the paramount authority of the Council on subjects relating to the final examination. But in regard to subjects of the preliminary examination, mechanics, physics, &c., the Council ought not to expect the University to abandon its well-considered plan of teaching. On all matters connected with the professional curriculum it was ready to yield, but not in regard to subjects of general education. If the resolution passed by the Council at its last session were continued, the students would cease to appear on the Students' Register. That would not be desirable, because the students would be able to say that they had ceased to appear there because they aimed at a higher education, and it would lead to the supposition that the Register only contained the names of minimum educated students. Under the circumstances he did not propose to vote for the motion about to be brought forward by Dr. Humphry.

Dr. HUMPHRY proposed: "That the examinations in education conducted by the universities be accepted as heretofore, but that if in any of these examinations the subjects of elementary mechanics of solids and fluids are not included, a knowledge of these subjects should be required at a subsequent examination." The President, he said, had in his opening remarks stated that the Legislature had intended the Council not to be mandatory but hortatory, and if that applied to medical studies *a fortiori* it applied to general studies. It could never have been the intention of the Legislature that the Council should be mandatory on the university in reference to general studies, and still less to the particular mode in which an examination in English should be conducted. The great work of the universities was connected with the general education of the students, and the examinations were conducted in what was considered the best manner by men who had given their lives to the consideration of the subject. The Council had almost always taken that view; it had been anxious that the general education of students should fall into the hands of the universities, and had passed several resolutions to that effect. The examinations conducted by the universities were of a high order, the requisites for admission to the Students' Register being considerably beyond the requirements of the Medical Council, and that the Council should refuse to sanction the examinations because they were not in accordance with its own inferior plans seemed scarcely credible. Every student was examined in Greek as well as Latin, and his knowledge of English was shown by the manner in which he wrote it, which was perhaps the best possible test. He had formerly proposed a similar resolution to that which he now brought forward; but it was suggested that the universities should be requested to give the Council their opinions on the subject. They had done so, and they had given the only answer which could be expected from them.

Dr. CHAMBERS, in supporting the motion, said that the Oxford University had always held that grammar (with logic) was an essential part of education, and that it was best taught by the Latin grammar. It was not likely that the University would change its method at the request of the Council.

Mr. SIMON said it was very disappointing that, after giving up a large portion of the last session to the consideration of the subject, they should now be returning to it. It would be impossible to do justice to Dr. Humphry's motion until after the proposed discussion on professional education. He strongly sympathised with the view taken by the University of Oxford as to the undesirability of instituting a special

examination in English, which, indeed, he regarded as a delusion. The University stated: "We do not think that the literary character of medical students will be lowered by your not insisting on a special English examination in the case of Oxford students." The question of physics had been before the Council on several occasions, and the view that it had taken was that elementary mechanics should be a part of the earlier education of students, and be passed before registration; but to press such a regulation in the case of the universities, where the subject was taught *in extenso*, was futile and ridiculous. The point on which the Council had continually insisted was that the purely medical curriculum, treated as a minimum, should be relieved from the subject of physics. If five or six years were given to medical education, time could no doubt be spared for a full course of physics, but that was not the case when the medical course only extended over forty-five months.

Sir H. PITMAN said he could not help feeling great surprise that the subject should be discussed in the Council in the year 1885, seeing that as early as 1859 it had resolved "that examination on general education should be eventually left entirely to the examining boards of the national educational bodies recognised by the General Medical Council;" and similar resolutions had been passed at subsequent periods. If the Council was of opinion that the examinations in general education should be left to the universities, why should it now be discussing the question whether the examinations of the universities should be recognised by the Council? It could hardly have been the intention of the Council to lay down the precise subjects of examination in general education at the universities; and if it had done so, he doubted whether the universities would accept any such arrangement. The Council had been all along urging the universities to conduct the examinations, and now that they were doing it exception was taken to the mode in which they were proceeding, and it was proposed to refuse recognition on the ground that the examinations did not include mechanics.

Mr. TEALE thought that the Council would be placed in an absurd position if it declared that the university examinations were not sufficient for its purpose.

Dr. WATSON said the subject had been thoroughly threshed out on previous occasions. They had again and again expressed their confidence in the action of the universities and their competency to conduct examinations for preliminary education, and it was hard that those bodies would not do what the Council required, but would insist on doing something that the Council did not want. There was no reason why a student who had passed a higher examination should not have a separate examination for mechanics, in order that all medical students, wherever taught, might be placed on the same footing. To have a student coming up without having passed the examination in elementary mechanics created extreme confusion in regard to all licensing bodies, and there was an uncertainty as to whether the student still required to be subjected to such an examination before he was permitted to go in for a professional examination. Again and again men had come up for the professional examination, and after they had passed it had been discovered that they had not passed the examination in elementary mechanics. There ought to be one rule for all students, whether coming from the universities or elsewhere; and if the universities would not conduct the required examinations, there were other bodies that would. If the universities carried out their threat, and allowed their students to go on without registration, all he could say was that those students might undoubtedly obtain university degrees, but they would not be able to obtain licences to practise from the corporate bodies. If the Council had, after repeated consideration, come to a definite conclusion on the subject, it ought to adhere to it until it had a better reason for reversing it than that the universities declined to accept it.

Dr. STRUTHERS said that the Council had already by a large majority passed a resolution as to English, and it was absurd to ask it six months afterwards to reverse its decision. The Council had also decided that elementary mechanics should be passed before registration, and it would be a complete waste of time to reopen the question. The only reason for reconsideration was the opinion expressed by the universities. What would be said if one of the Scotch universities had tried to defy the Council in the same way? Surely, the universities could easily institute examinations in the required subjects; and if they would not, there was the College of Preceptors, whose examinations met all the requirements. He moved as an amendment: "That in reference to the letters now received from the University of Dublin, the University of Oxford, the University of Cambridge, and from Queen's College, Cork, the Council sees no reason to depart from the resolutions adopted at the last meeting in regard to preliminary examination for the registration of medical students."

Dr. WATSON seconded the amendment.

Dr. PETTIGREW supported the amendment, and expressed a hope that Dr. Humphry would withdraw his motion.

Dr. BANKS supported the motion. The Oxford examination in English was perfectly adequate; and as to Dublin University, it could not be expected to alter its regulations at the bidding of the Council.

Dr. DUNCAN, in supporting the motion, said it would be preposterous for the Council to say that they would not be satisfied in regard to English with what satisfied the University of Oxford. The difficulty as to elementary mechanics, which was not included in the preliminary examination at the University of Dublin, would be easily overcome by Dr. Humphry's proposal that the subject might be taken in a subsequent or separate examination.

Dr. HAUGHTON said there was no desire on the part of the universities to act offensively towards the Council. As to the subject of elementary mechanics, it ought to be taught in the same way to all students, whether medical or otherwise; and at present it was certainly not taught efficiently in the schools.

The debate was then adjourned.

THURSDAY, MAY 14TH.

At the meeting of the Council to-day, the debate on Dr. Humphry's motion was resumed, and after some further discussion the motion was agreed to in the following modified form:—"That the examinations in general education conducted by the universities be accepted as heretofore; but that if in any of these examinations the subject of elementary mechanics is not included, a knowledge of that subject be required at a separate preliminary examination." The amendment of Dr. Struthers was withdrawn. A report was received from the Pharmacopœia Committee with a revised copy of the new Pharmacopœia. A cordial vote of thanks was given to Dr. Quain for his valuable labours in connexion with the work. A report was presented from the Committee appointed to make inquiries as to possible sites available for the purposes of new offices for the Council. The Committee reported in favour of a site on the Savoy estate of the Duchy of Lancaster. The general feeling of the Council was adverse to the suggested change; and after discussion it was resolved to refer the report to the Executive Committee, with power to take steps to improve the ventilation of the hall in which the Council meets; or, if necessary, to report on the improvement of the building at the next meeting.

Dr. PITMAN then moved: "That a committee be appointed to consider and report in what way, if any, the accumulated funds of the General Medical Council can be applied in promoting scientific research for the public good."

The debate on the motion was adjourned, when the Council rose.

STRANGULATED OMENTAL HERNIA.

To the Editor of THE LANCET.

SIR,—I regret to have overlooked until to-day Mr. Treves' letter in your impression of April 25th. But I do not propose, at present at all events, to repeat, extend, or multiply the arguments I can muster, having already been favoured, on May 17th, 1884, and April 25th last, with space ample for the purpose. In the communication of a year ago Mr. Treves will find, I think, the answer to his objections. But even should he not be convinced on reading it again, I would prefer to wait till, as he well puts it, my "arguments have been supported or opposed by more extended clinical data, and when they have met fully the test of the post-mortem room." I am glad that he has taken up the subject, for the more it is noticed the better its chances of thorough ventilation, not so much on paper as in the thought and practice of surgeons, in the presence of illustrative cases. I am, Sir, yours truly,

Liverpool, May 10th, 1885. RUSHTON PARKER.

THE LANCET.

LONDON: SATURDAY, MAY 16, 1885.

THE most interesting event which has transpired up to the present time at the meeting of the Medical Council is the Address of the President, Sir HENRY ACLAND. The number of the subjects lightly touched upon give interest to the speech. The President's gentleness of touch is his great quality. One occasionally comes to a point at which strength and determination of language would be a relief. Failures, delays, and disappointments, that move less serene men than Sir HENRY, only bring out his imperturbable suavity; and the most imperfect settlement of public questions, over which the profession grieves, he views with an equanimity such as DARWIN might display over the slow processes of Evolution. In the early part of his address he recalls the happiness with which he had met the Marquis of RIPON, and had reminded his lordship of his efforts fifteen years since in favour of medical legislation. It is all just where it was where the Marquis left it. Nineteen corporations are all fighting for their own hand, and the weak hand of Parliament has been shown to be powerless in the matter. But to Sir HENRY ACLAND's happy mind there is no disappointment in all this. He told the Marquis that he sincerely believed that though he had failed, thanks to the honest rivalry among teachers and between institutions, "the principles" were being carried out, and the public good secured. We can only look on at a distance and admire this power of seeing unmixed good in the failure of all Governments to accomplish what the Government and the profession thought necessary for the public good, and what a Royal Commission recommended. The report of the interesting incident of a conversation between the Marquis and the President would have been a little more interesting if Sir HENRY had told us the Marquis's views of the situation and of the obstinate resistance of the medical authorities to changes for the public good.

The first day of the Council's meeting was occupied very largely with the discussion of a case of alleged misconduct. It is very painful to find from the President's address that no less than thirteen cases of alleged misconduct by registered practitioners have been referred in the past year to the solicitor. These largely have reference to unqualified practice—registered medical men acting with unqualified persons as partners or assistants. We have often cautioned medical men against conduct of this kind, which brings the profession into discredit and its members often into positions of much embarrassment. The Council will have the full approval of medical men generally in exercising its judicial powers against members of the profession who act unworthily. It is unsatisfactory to notice from the President's address that there is still much uncertainty and difference of opinion as to where the duty and power of prosecuting offenders should lie. The Corporations seem very reluctant to vindicate the honour of the profession, though always ready to tell Parliament that their moral influence alone preserves the high standard of professional opinion and conduct. The Public Prosecutor shows great unwillingness to do work for which, one would suppose, he was brought into existence. And the Medical Council, from its earliest days, has discouraged the idea that it had any prosecuting function. In regard to this duty of prosecuting for breaches of the Medical Act, all the parties that should have acted have made excuse, and too often the work has had to be done by private medical men or medical associations organised for the purpose. Since the Home Secretary, in his plain way, expressed his opinion that the Medical Council has duties of judgment in regard to such cases, the judicial functions of the Council have come into more frequent action, and a great part of the present programme is filled with motions having reference to cases of alleged misconduct. In one such case, as will be seen by our reports, the Medical Council has erased from the Register the name and qualification of GEORGE WASHINGTON EVANS, who was no less than a Fellow of the Faculty of Physicians and Surgeons of Glasgow. His publications and advertisements on the subjects of diseases of women and debilities of the generative organs constituted, in the opinion of the Faculty, "infamous conduct in a professional respect," and led to the erasure of his name from the Register of Fellows on December last. The Medical Council has endorsed the action of the Faculty.

The inevitable discussion on Preliminary Education has begun; but it really seems as if the Council was going to be deprived of the pleasure of its full development on this occasion. Some of the members begin to see that there is something bordering on the jocose in its treatment of this subject. Not only does it turn up annually, but, as Sir HENRY PITMAN showed on Wednesday, the continuous idea of the Council from its first meeting in 1859 has been to rid itself of all responsibility in regard to preliminary examinations, having voted repeatedly in favour of leaving them entirely to the Universities and other national educational bodies. But having almost effected this result, they keep on worrying these bodies, and dictating to them how to do the work. The consequence is not only that the Council wastes time which it might well devote to improving strictly medical education, but it receives protests from the Universities which, though couched in polite language, are not destitute of pungency.

THE *American Journal of the Medical Sciences* for April contains a careful and useful paper, by Dr. WINSLOW of Baltimore, on the Operative Treatment of Pyloric Stenosis. In the forefront he places pylorectomy, and gives a table of sixty-one cases of this operation. From it we learn that there have been sixteen recoveries and forty-four deaths, while in one case the result is not given. BILLROTH has operated eleven times, with success in six cases, and his results are the best that have been yet attained by any surgeon. The mortality in cases of cancerous stricture of the pylorus has been 76 per cent. The factors which seem of chief importance in determining the result of the operation are the age and general condition of the patient, the existence of extensive adhesions between the pylorus and the neighbouring organs, particularly the pancreas, and the length of time occupied in the operation. The younger the patient the greater the power of resisting collapse. The presence of adhesions not only greatly adds to the difficulty of the

operation, and therefore to the time required in its performance, but it renders the danger of hæmorrhage and of subsequent peritonitis greater; while in some cases gangrene of the transverse colon has occurred owing to removal of the omentum and transverse mesocolon. Nearly 50 per cent. of the patients operated upon have died of shock within twenty-six hours, and of the cases which have recovered not one has lived for three years without recurrence of the disease when the operation has been done for cancer. Gastro-enterostomy, by which the stomach is made continuous with the small intestine beyond the pylorus, has been performed thirteen times during the last four years. Of these nine have died within a month of the operation, and four, or just over 30 per cent., have recovered. This is a better result than was obtained in the early cases of pylorectomy; and when it is borne in mind that the operation has been done in cases of cancerous and other strictures of the pylorus, in which the adhesions have been so extensive as to render impossible or nearly impracticable the operation of pylorectomy, it is evident that the balance in favour of gastro-enterostomy is greater than the mere figures show. The operation consists in raising a loop of small intestine and, after making an incision into its free border and into the stomach, uniting them by sutures. It is thus a shorter and simpler operation than pylorectomy, and does not expose the patient to the same risks from shock or hæmorrhage. It has been urged against it that it is in no way radical, that it only palliates the disease, and allows the new growth to extend and exert its deadly influence upon the system. This is no doubt true. But, on the other hand, it is to be remembered that the success in the radical cure of cancer in the situations most favourable for it has not been such as to render it probable that surgery will ever be able to cope effectually with this disease when it attacks the stomach, and the results of pylorectomy thus far point in the same direction. Gastrotomy, gastrostomy, and duodenostomy have all been performed for cancer of the pylorus, but, for various reasons, are sure not to be widely practised or even repeated again. Digital divulsion of the pylorus, or LORETA'S operation, has been practised with great success for cicatricial stricture of the pylorus. Of five completed cases three recovered, and a sixth case was doing well three days after the operation. It is, of course, quite unsuited for cancer of the pylorus, but in cicatricial stricture of that orifice it gives speedy and complete relief, and the procedure appears to be free from much of the danger attending the graver operations we have been referring to. Among Dr. WINSLOW'S conclusions, which, we believe, are thoroughly supported by the evidence at hand, are these: that pylorectomy for carcinoma should only be performed in the limited number of cases where, with marked stenosis, the pylorus is not adherent to the neighbouring structures and the patient is young and fairly strong. In other cases of cancerous stenosis gastro-enterostomy should be performed. In cicatricial stenosis digital divulsion of the pylorus should be performed when the symptoms are sufficiently severe to demand operative interference.

DISCREDIT was for a long time cast on the attempts to explain the prevalence of certain epidemic diseases by referring them to meteorological conditions, and this was to a great extent deserved, because those who at that time interested themselves in this subject were content to assert that this or that epidemic owed its prevalence to what they were pleased to term "climatic" or "telluric" influences without any apparent effort to ascertain or explain what were the precise conditions which had been operative, and which were disguised under such general terms as we have referred to. During later years, however, the attempts to ascertain how far meteorological conditions influence the prevalence of disease have been on a much more scientific scale, and medical officers of health are, in their annual reports, now in the habit of making records bearing upon this influence, which cannot fail in the long run to be of material value. Mr. C.E. PAGET, medical officer of health for the Westmoreland Combined Sanitary District, makes a contribution to this subject in connexion with a detailed review of the prevalence of "fever" in the borough of Kendal since the passing of the Registration Act. During the early portion of the period referred to, "typhus" was the prevailing fever, but it gradually changed its name as years went on, until it became evident that, although typhus might not have been altogether absent at certain periods, it was really enteric fever that Kendal has had to deal with. During the decade 1842-51 the mean annual "fever" mortality per 1000 of the population was 1·58; in the decade 1852-61 it was 0·70; in the decade 1862-71 it was 0·41; and during that ending 1881 it had further fallen to 0·26. The steady decline in the mortality is attributed in the main to the progressive sanitary improvements which have taken place, but when the separate prevalences which examination of the death-rates exhibit are studied it would appear that other influences have been at work; and Mr. PAGET has made every endeavour to ascertain how far these influences may have had to do with prevailing meteorological conditions. The value of the earlier records available were found to be much affected by the circumstance that only the mean annual variations could be learned, and so it comes to pass that as regards rainfall, for instance, whilst it is almost undeniable that in Kendal there have been occasions when an excessive fall of rain has been associated with a rise in the prevalence of enteric fever, yet mean annual records alone do not help much in deciding the question. Such mean records as to the state of the barometer are still less helpful, and hence, although Mr. PAGET is convinced that sudden depressions in the mercury, especially when associated with excessive rainfall, have favoured special prevalences of this fever, yet he is obliged to base his opinion rather on certain recent occurrences than on any observations extending over a series of years. The temperature records, though also limited to annual means only, were found to be a little more helpful, the rise and fall in the total mortality from continued fever corresponding in a more or less degree with a rise and fall of the mean annual temperature in twenty-nine of the years between 1838 and 1881; variations to the contrary only being indicated in four of the remaining seventeen years. In view of the imperfect means at his disposal, Mr PAGET does not attempt to lay down any general conclusions, and it is evident from his report that he would be the first to admit that when meteorological conditions influence the rise and fall of the mortality from any special disease, this influence may be largely, if not in the main, brought about

by the operation of these conditions on purely local states, which, being absent elsewhere, might prevent any similar conclusions being arrived at in other places. Thus, in one special outbreak of enteric fever which is several times adverted to, it seems all but certain that the conditions of sewerage which existed at that time in Kendal constituted a local state on which meteorological changes could operate with special force. The incidence of the disease fell chiefly on a portion of the town having deficient sewer ventilation, and it is precisely under such circumstances that heavy rainfall, which would force foul air out of the sewers at every available weak point in the system, together with a diminution of barometrical pressure which would aid in the expulsion from the soil into the atmosphere above of any accumulation of foul air from sewers or elsewhere, would tend to bring about one of the very conditions so well known to be associated with prevalences of enteric fever. We by no means wish to suggest a limit to the operation of meteorological conditions by explaining away any direct influence they may have upon disease; but merely to indicate that, with the very imperfect knowledge we at present possess on the subject, the study should be approached with all scientific caution. Many of the observations which can be made by officers of health must almost necessarily be limited to comparatively small areas, but when put together they will aid in the solution of a very difficult but most interesting subject. Hitherto not many medical investigators have been attracted to its elucidation, but such reports as the one we are now discussing, and the carefully prepared papers which are from time to time communicated to the Epidemiological Society by Dr. G. B. LONGSTAFF, all tend in the direction indicated.

MRS. GRANT DUFF, the wife of his Excellency the Governor of Madras, has recently presided over a meeting, at Madras, for discussing the establishment of a hospital there for the Hindu and Mahummedan women whose religious feelings and social duties preclude them from seeking the aid of medical men. The speech delivered by Mrs. DUFF at this interesting meeting, which seems to have been attended by all the notabilities of the Presidency, native as well as British, abounds in good sense, refined feeling, and the truest appreciation of those silent but potent influences which are most likely to assimilate our great Indian Empire into our own national family. In addition to this matter of good sentiment, in the speech there is much light cast upon the present state of medicine in India. There is, we are told, no institution in Madras to which Gosha women can go without violating their religious feelings. The caste wards of the General and Lying-in Hospitals are under the superintendence of men, and into them a Gosha woman will rarely enter, except as a last resource, and when human aid is no longer of any avail. We are also informed that the greatest suffering, ending sometimes in death, is caused by unskilled and unqualified female practitioners throughout India.

To meet these two difficulties the new institution is started. The original conception of it is due to Surgeon-General CORNISH, who, with his usual happy facility for foreseeing great results from unpretending projects, when they are set in the mind of the world in the right way, called the attention of the Government to the subject last year, and led the Government to determine that, so soon as the natives expressed a strong desire to have the suggestion carried into practice, it would give its support. That expression, led off by a native gentleman, Mr. RAMASAWENEY, having come "in a very liberal form," the initiatory stages of the project may be considered as over, and the prospect of the existence of a great and useful institution is fairly in view. The work intended to be carried out at the hospital will be the teaching of the practice of medicine by the European methods, with all the resources of modern science; the selection as teachers and practitioners of none but those whose status is of competent worth; the performance of important surgical operations which cannot at present be done from the want of a suitably fitted up hospital; and the introduction of the necessary requirements for a school where diseases of the eye, and other diseases requiring particular and advanced skill for their successful treatment, can be combated. The hospital—as Mr. AIGER, one of the prominent supporters of the movement, explained—will be under the superintendence of a lady, who will induce lady patients to visit it; "and thus, while the scientific system of dealing with disease will be adopted, the ignorant practitioners will be gradually cleared away." It is intended for the present to have from twenty to twenty-five beds for in-patients, to increase the number as the demand for accommodation extends, and to have consulting-rooms for caste and Gosha women. The QUEEN-EMPRESS is to be asked to be patroness; her Excellency, Mrs. GRANT DUFF, vice-patroness; and native ladies throughout the Presidency are to be solicited to give their countenance and support, and a considerable amount of money has already been subscribed. In the new design the scope for the kind of labour very suitable for women is of the widest; and if something like it were instituted in all our dependencies, where native habits have to be conciliated, so much the sounder would be the union between the centre of power and the radius of it.

Annotations.

"Ne quid nimis."

THE ARMY MEDICAL SERVICE IN THE SOUDAN.

IN the discussion last week on the vote in the Army Estimates for medical establishments, the question of the relation of the National Aid Society to the Army Medical Department was brought under notice by Dr. Farquharson. The statements which have from time to time been made as to the benefits conferred upon the army by the Society and the inferences which have been drawn as to the inefficiency of the Medical Service, if it required, in the interests of the soldier, to be supplemented by this voluntary and irresponsible aid, certainly seemed to call for some explanation. Dr. Farquharson, therefore, without wishing to undervalue any service the Society might have had it in its power to perform, asked who was responsible for the care of the sick and wounded, and whether there was any deficiency in the supplies of necessaries and even of superfluities furnished by the Army Medical Department. The financial Under-Secretary for War, while claiming for the National Aid Society that it was doing good work in Egypt, distinctly laid down

the principle that the Army Medical Department was "not only primarily but entirely responsible for the care of the sick and wounded, but this responsibility did not impair the recognition of the generous and charitable aid rendered by the Society." We still hold strongly to the opinion that as the Government is bound to provide all that may be requisite for the sick and wounded soldier, and has in the present campaign made abundant and liberal provision for all their wants, the operations of the National Aid Society would have been much more deserving of praise had they been directed in favour of the wives and children and of the widows and orphans of the soldiers, for whom no adequate provision is made by the Government. We have considerable doubts as to the benefits conferred by the present working of the Society; we have none as to the claims of the widows and orphans upon the kindness and benevolence of those who have it in their power to aid them. It is very satisfactory to find that there has not been the slightest complaint of any shortcoming on the part of the medical staff, either as regards personal service or the requisite supplies, and in the absence of such default it is difficult to understand how the expenditure incurred in supplementing that which is already sufficient can be justified.

THE NEW BRITISH PHARMACOPŒIA.

ON Thursday afternoon the Pharmacopœia Committee, through its chairman, Dr. Quain, were able to report the virtual completion of the new Pharmacopœia and to place a copy on the table. Much satisfaction was expressed with the work, and high praise accorded to Dr. Quain and to the editors of the work, Professors Redwood, Bentley, and Attfield, for the way in which they have performed their respective duties. The revised Pharmacopœia contains over 100 pages of new matter and over 100 new articles, including coca, jaborandi, apomorphine, boric acid, thymol, menthol, iodoform, &c. The volume will be sent to the members of the Council for their suggestions. After these have been discussed and disposed of by the Pharmacopœia Committee, this committee will forward the work to the Executive Committee for publication.

THE ARMY IN THE SOUDAN.

THE public have at length received from the Ministry an indication of the course which they mean to take with reference to the troops now serving in the Soudan. Three courses appeared to be available as regards the army in the interior; to maintain their present position, or to concentrate at Dongola and places below Dongola, or to revert to the line of Wady Halfa or Assouan as the effective frontier of Egypt and withdraw the troops as soon as possible from the advanced positions now occupied. The Government has decided to adopt the third course as soon as the rise of the Nile, which is expected to begin in about three weeks, shall enable the movement of the troops and stores to be effected. Lord Hartington stated that the troops at present are fairly protected by huts or other temporary cover, and that although the heat is very great, and the inconvenience and suffering they have to undergo are very considerable, their health has not materially suffered. This change, when effected, will enable the authorities to withdraw a considerable portion of the 9000 men now occupying the posts in the interior. With regard to the force at Sawakin, the Ministers do not seem yet to have been able to make up their minds as to what they mean to do. They have given up the idea of carrying on to Berber the railway recently begun, but to what extent they will remove the troops, or what provision they will make for their maintenance at Sawakin appears to be still among the problems which our rulers find themselves unable to solve. The fears which we have expressed as regards the health of the troops at Sawakin seem to be entertained also by Lord Wolseley, for Lord Hartington stated that "he anticipated that if that force is retained there for a considerable time during the hot weather, it may materially suffer in health." But Ministers desire to suspend their judgment as to the course they ought to pursue until they receive further information. The indecision and delay which have characterised the whole of the proceedings with regard to the Soudan appear still to mark the policy of the Government. It is impossible to read Lord Hartington's speech without asking for what purpose has all this expenditure of life and money been made? The thousands of lives which have been sacrificed, the millions of money which have been thrown into the Nile, or wasted in the desert, have produced nothing but sorrow and shame. The events of the last twelve months in the Soudan must ever form a subject of bitter regret and lamentation to every right-thinking Englishman.

EXCISION OF CEREBRAL TUMOURS.

THE unusual interest which characterised the proceedings of the Royal Medical and Chirurgical Society on Tuesday last was due to the reading of a paper on the now famous case which has already occupied attention both in the profession and outside it. We have called the case a famous one, because we are of opinion that it will prove to be the first of a long line of more complete successes. That this opinion is not one of exaggerated hope will be admitted by those who are most competent to judge as well as by those whose reason is not clouded by prejudice. It is singularly unfortunate that one of those accidents which not unfrequently mar the most brilliant surgical successes should have arisen in the case in question. That the patient owed his death to an avoidable accident will be readily conceded if it be remembered that there are now on record—and Dr. Macewen added others at the discussion—cases of surgical interference with the brain far more extensive than the operation performed by Mr. Godlee; so that the special merit of the case recorded by Dr. Hughes Bennett merely lies in this. It was a triumph of medical diagnosis; the symptoms alone revealed the growth, which, unless removed, would have proved fatal. There was nothing very remarkable in the surgery of the case, and nothing special about the nature of the tumour. The chief interest was a medical one; and in this connexion we draw attention to the valuable clinical observations of Dr. Hughlings Jackson, which may be read in our report of the proceedings. As was to be expected, the discussion took a surgical aspect, and there is no question that, as Dr. Ferrier remarked, cerebral surgery is still in its infancy. One of the points which future experience must decide is as to the relative value of closing the wound permanently or treating it by free drainage. Experiments on animals and operations on man show that a large effusion of serum is the necessary accompaniment of operations on the brain. Dr. Ferrier and Mr. Horsley, from their experience with monkeys, believe that a permanent closure of the wound at the end of the operation is the right course to adopt. Mr. Godlee, Dr. Macewen, and Mr. Davy appear to hold the opposite view. For them this large effusion of serum and blood constitutes a source of danger chiefly from the tension which it sets up, and which may lead to opening up of the wound, or to worse effects on the brain. Mr. Godlee and Dr. Macewen used the drainage-tube, and Mr. Davy his open-air method of treatment. Another practical surgical point is the mode of dealing with the parenchymatous bleeding from the wounded brain; all authorities recognise the "welling up" of blood in a wound made in the healthy brain. Gliomata are frequently of a very vascular nature, and the occurrence

of spontaneous hæmorrhage into their substance is a frequent accident. The hæmorrhage during Mr. Godlee's operation was evidently very great, and it is possible that the nature of the tumour may partly account for this. However this may be, it is obvious that one of the surgeon's difficulties is the treatment of the hæmorrhage, and the treatment which Mr. Horsley has successfully employed in monkeys—the hypodermic injection of morphia—is worthy of trial in man. Dr. Macewen took exception to the use of the galvano-cautery as a hæmostatic, on the ground that by causing much irritation it favoured the production of hernia cerebri. This must, we think, be a moot point. There are other surgical points—such as the question of the reimplantation of the trephined bone, the best kind of antiseptic dressings, the mode of dealing with diffuse growths, and the like—which we cannot enter upon now, and which must remain more or less open questions.

THE UNIVERSITY OF LONDON.

THE annual general meeting of Convocation of the University of London was held on the 12th inst. The first business was the election of Chairman of Convocation in the room of Dr. Storrar, who retires. The only candidate for the appointment was Mr. Frederic John Wood, LL.D., who was accordingly elected. In support of a vote of thanks to Dr. Storrar for his services during the past twenty-one years, Mr. Wood reviewed the history of the University since 1848, and the part taken by Dr. Storrar in the contest with the medical authorities at a time when the degrees conferred by the University were not recognised. Dr. Storrar, he concluded, had been the true, noble, and self-devoting friend of the University. The resolution was unanimously adopted. The question of the matriculation examination, and a resolution affirming that the principle of allowing candidates who have failed only in one subject to come up for examination again in that subject is worthy of acceptance by Convocation and the Senate, were referred to the Annual Committee, and the House was shortly afterwards counted out. The ceremony of the presentation of diplomas, exhibitions, scholarships, medals, and prizes to undergraduates and graduates of the University took place on the 13th inst., in the presence of a large assembly.

"WHY NOT EAT INSECTS?"

A GREAT divine has told us that the maxim of creation is "Let us prey." We are not, however, prepared to carry this principle so far into practice as to rob the poor birds of their food. Beyond question insects were made for birds to eat; or, to put the fact in another form, birds were intended to eat insects. Man may eat birds, but not birds' food. Mr. Vincent Holt—who for some mysterious reason has set himself to convince mankind that, as we are hereafter to be preyed upon by the worms, we ought to "take it out" of the worms while we can—argues colloquially thus: "Them insects eats up every blessed green thing that do grow and us farmers starves. Well, eat *them*, and grow fat." We prefer a more logical and comprehensive policy, and as the insects eat the green things, and the birds eat the insects, we will eat the birds. It would not simply be cruel to the birds, but flying in the face of nature, to interpose between them and their food; more particularly as by passing through their bodies and becoming birds' flesh insects are brought nearer to our own standard of tissue. If Mr. Holt will only sit down for five minutes and think the question out in its economic as well as its dietetic bearings, he will agree with us that the course of conduct he prescribes would be as irrational as taking to eating grass ourselves instead of feeding on that delicacy by proxy, and afterwards eating our agents in the shape of mutton and beef. If the principle on which Mr. Holt reasons were carried out to the bitter end, there would be an end of intermediates altogether, and we should take to living on carbon, oxygen, hydrogen, and nitrogen, with a little sulphur, instead of boiled eggs, for breakfast, which, to say the least, would be both disagreeable and inconvenient. If anything could possibly induce us to eat insects, it would be Mr. Holt's elegant *brochure*, got up with persuasive taste by Messrs. Field and Tuer; but we decline. "Why not eat insects?" Because the idea of devouring slugs, spiders, and centipedes, not to mention other more horrorful monstrosities of the edible insect class, is revolting. Life would not be worth living at the price. In dire straits of famine men and women may bring themselves to devour rats and mice and slugs and caterpillars; nay, in such a state of matters, these creatures might come to be considered delicacies. But there is not the least reason why we should, in pure wilfulness, take to filth as food while clean things that do not creep are to be obtained. Therefore we say if "these insects eats up every blessed green thing that do grow and us farmers starves," let "us farmers" be a little less hard on the birds, and then, instead of being compelled to eat the insects, the birds will do that for them, and they can eat the birds.

PNEUMOTHORAX FOR HÆMOPTYSIS.

AT the last meeting of the Clinical Society Dr. Cayley read a paper on a case of profuse hæmoptysis in which he had artificially induced pneumothorax with the express purpose of arresting the hæmorrhage. We refer our readers to our report for the particulars of the case. The question which we have to discuss here is as to the wisdom and propriety of the procedure which Dr. Cayley so boldly adopted. It is well known that hæmoptysis is not seldom fatal in and of itself; it is also familiar to clinical physicians that hæmoptysis which threatens to prove fatal does not unfrequently become arrested by natural processes. Clinical knowledge can at present carry us no further. That the induction of pneumothorax should be a powerful remedy for checking hæmoptysis rests upon sound physiological data. By inducing pneumothorax the lung is placed *hors de combat*, its circulation is reduced to a minimum, its aspirating power on its contents is done away with, and the lung is reduced to the state of atelectasis of a fœtal lung. So that there is abundant physiological justification for Dr. Cayley's procedure. The presence of air in the pleural cavity cannot be regarded as a very dangerous condition, especially if the air be filtered so as to deprive it of its suspended organic particles, and in this connexion the suggestion made by Mr. R. W. Parker in the discussion which followed Dr. Cayley's paper is worthy of special attention. But, again, the sudden induction of pneumothorax may in virtue of its suddenness be attended with such a physiological displacement or disarrangement of natural processes as to place the patient's life in jeopardy. Another consideration which must play a part in coming to a decision as to whether pneumothorax should be brought about or not is the question of the state of the lung, and this is a very wide subject. If the lung be the seat of extensive adhesions or of extensive consolidation of no matter what kind, it is obvious that pneumothorax could not be induced, or induced so partially that the necessary arrest of the circulation through the lung would be impossible. Indeed, on reflection, it will be perceived that the class of cases in which the treatment is likely to prove efficient is a limited one. It is probable that in cases of chronic phthisis limited to the apex of the lung, where the profuse hæmoptysis is the result of rupture of an aneurysm, the induction of pneumothorax would cause the circulation to be reduced to such a low ebb that the hæmorrhage would be arrested. However, it is almost futile, in the absence of data, to pursue the subject

further. The operative treatment followed out by Dr. Cayley will probably not frequently come under consideration; but it must be acknowledged that until we know something more of its practical application the question of its judiciousness must remain in abeyance.

SUCCESSFUL ŒSOPHAGOTOMY FOR REMOVAL OF A HALFPENNY SWALLOWED THREE YEARS PREVIOUSLY.

A BOY seven years of age, now in the Queen's Hospital, Birmingham, has a history rarely paralleled in the annals of operative measures for the removal of foreign bodies. The patient was admitted under the care of Dr. Suckling for asthma, for which he had been unavailingly treated. The history was elicited that a halfpenny had been swallowed three years previously, and that dysphagia and dyspnœa followed immediately afterwards. No attempt at extraction was made, and the incident appears to have been forgotten. On admission the child presented all the appearances of chronic starvation, and only the smallest quantity of liquid could be swallowed, the greater portion of which regurgitated. To solids of any kind the passage was impermeable. Dyspnœa was constant, with paroxysmal cough, copious expectoration, and deficient respiration on the right side. The case having been transferred to Mr. Bennett May, that gentleman found the œsophagus impermeable to anything but the smallest bougies at a point beyond the top of the sternum, but all attempts at detection or removal of the cause were fruitless. On the 25th ult. Mr. May opened the œsophagus low in the neck, and, having passed the finger down it, was able to feel a metallic edge through the wall of the tube. The coin lay in front of the œsophagus, apparently between it and the trachea or the right bronchus. As no point of communication could be discovered, a second incision was made in the œsophagus, and through it the halfpenny was with some difficulty withdrawn. A free escape of air from the wound indicated the existence of a communication between the tubes. The subsequent nutrition of the child has presented considerable difficulty, the fluids swallowed regurgitating through the wound. The patient is now fed three times daily by injecting into the stomach through an elastic catheter half an ounce of brandy and an egg beaten up in half a pint of new milk. On the sixteenth day after the operation the child was sitting up in bed, talking cheerfully. He sleeps well, the bowels act twice daily, and the steady improvement in health augurs complete recovery.

"NO DOCTORS AMONG THE PEERS."

WHO was the witty Premier who declined to make an eminent physician a peer because he would not have as an equal in rank any man upon whom he could call for what he was pleased to represent as menial services? The commotion was great in the House of Lords a few afternoons ago when a noble member fell down in a quite ordinary "fit," and when the *reductio ad absurdum* of etiquette was reached, the House being hastily adjourned to admit of the entrance of a couple of commoners to minister to the needs of the sick peer, and when the members of that august assembly were so generally scared that only one peer, the Earl Spencer, had the presence of mind to hurry to the Commons for medical assistance. We do not, of course, intend to imply that members of the medical profession ought to be introduced into that assembly for the sake of having a doctor in attendance; but it is amusing to note how dire is the panic when human nature comes to face, or to be seen facing, death without medical assistance. We are not of those who think the medical profession stands in urgent need of such Royal countenance as would be involved in bedecking one of its members with a coronet. If Art is the better for being patronised, Science can stand alone, and will not languish for the smile fashion withholds from its professors. All the same, the custom so long honoured by a laborious breach of good manners is very crabbed and wondrously weak.

DEATH FROM HYDROPHOBIA.

LAST week Dr. Diplock, coroner for West Middlesex, held an inquest on the body of a journeyman blacksmith, aged twenty-three, who died, according to Dr. Ferris of Uxbridge, with all the symptoms of hydrophobia. The history showed that there was a possible bite from a dog two years previously, but there seems to be some doubt on this point. If the case were one of rabies, the period of incubation was even for rabies, rather long. Seeing that the case is not perfectly clear, it is allowable to speculate on its nature. Now, Dr. Broadbent and others have placed on record cases which have been characterised by all the symptoms of hydrophobia, which were certainly not due to the usual cause of hydrophobia—i.e., the bite of a rabid animal. In the cases in question there would seem to have been a decided history of terror, almost amounting to mania. This terror, or extreme fright, may have been an efficient cause in bringing about those nervous symptoms which are the chief features of rabies, or the terror may have been one of the symptoms of the nervous disease, however originated. The chief symptoms of rabies may be explained on the view of an extremely irritable state of the grey matter of the spinal cord, medulla oblongata, and adjacent parts. This irritable state of an important part of the cerebral nervous system need not always be due to the action of the virus of rabies. Other conditions may bring it about, and some authorities have asserted that acute poisoning by alcohol, and perhaps other substances, may give rise to the same condition. It is possible that the case on which the inquest was recently held was one of this abnormal class.

DEFECTIVE SUPERVISION IN SCHOOLS.

ANOTHER very painful case of death in a schoolboy is reported from Darlington. The very temperate statement of the father of the little boy is given as follows by the *Leeds Mercury*:—

"Mr. David Davison, of Lieben Lodge, Darlington, father of the deceased, was examined, and stated that his son was a healthy boy, and had never been seriously ill previously in his life. On the 23rd ult. deceased came home and said he had been ill-treated by the boys of the fifth and sixth forms, who were from fifteen to seventeen years of age, while his boy was ten years of age. He could not sleep, and complained of his knee being lame and being unable to kneel. He went to school, however, on the 24th, and returned at noon in an exhausted state, complaining of pain in his right leg. He called in Dr. M'Carthy and Dr. Gibb, of Newcastle, but the boy lingered, and died on May 7th. He said that the boys had pulled him down and dragged him about. He said they had done so every day, inside and outside school, wherever they had a chance."

Dr. M'Carthy testified to the existence of inflammation in the knee, and of inflammatory fever. He considered them due to such injuries as the boy described to him and Dr. Gibb as having been suffered. The medical witness was interrupted in giving evidence as to the boy's account of what happened. And the coroner seems to have supported the objection made by a solicitor representing one of the boys of the school. The verdict of the jury was as follows: "They were unanimously of opinion that death was caused by accident, but there was not sufficient evidence to show how." They added that they thought a little more guardian-

ship might be exercised over the boys out of school, though they did not by this convey an imputation against any person. We shall be deeply disappointed if this inadequate verdict is to end the inquiry into this case.

THE INFLUENCE OF SEA-VOYAGING UPON THE GENITO-UTERINE FUNCTIONS.

DR. IRWIN of New York, who has had much experience as a ship-surgeon, finds from observations on 451 women that sea-voyages have very marked influences on the uterine functions, producing emmenagogue and rarely the contrary effects; but amenorrhœa often follows landing after a voyage. Habitual discomforts in menstruation are aggravated, and dysmenorrhœa is the commonest complaint, next to sea-sickness, for which the ship-surgeon is consulted. A sea-voyage is also said to produce aphrodisiac effects on both sexes, but the author thinks that high living, idleness, and the close association of the sexes should be discounted in weighing this effect. Abortion and premature labour, when they occur, are probably due to sea-sickness. Besides acting as an emmenagogue, sea-voyages produce tonic, alterative, and sedative results, and are useful in chlorosis, retarded sexual maturity, uterine debility, sterility, and threatened phthisis.

A RUSSIAN MANUAL OF LARYNGOLOGY.

DR. W. N. NIKITIN has recently published a "Handbook of Laryngoscopy and Diseases of the Larynx" in Russian, the first book on the subject that has appeared in that language. He employs sponges for making applications to the larynx, though he adds that dossils of cotton-wool are more convenient, but, apparently, is prevented from using them by his fear of their becoming detached and falling into the trachea. He uses the term "croup" in an anatomical sense, and speaks of croup of the pharynx, and, according to the *St. Petersburg. Med. Woch.*, a confusion of terms is thus produced which is to be regretted. The same paper thinks that the author would have done more service for Russian medicine if he had translated one of the numerous valuable manuals which already exist in other languages than by his own original work.

A MEDICAL MAN CENSURED.

AT an inquest recently held at the Royal South Hants Infirmary, Southampton, touching the death of a boy named John Arnold, aged thirteen, a very important question arose as to the duties of a charity medical officer. It appears that the deceased injured his finger in a chaffcutter on Thursday, April 2nd, and that on the same day he was seen by Mr. Hutchinson, who advised as to the treatment and ordered the patient to come to him again on the following Saturday. By that time the wound was found to have taken on unhealthy action, which in the course of two days developed into gangrene of the little finger, calling for amputation. Mr. Hutchinson very wisely declined to administer an anæsthetic and perform the operation himself; and, as his partner was ill, he determined to send the case to the infirmary. After the removal of the finger matters went on satisfactorily for a week, but at the end of that time tetanus supervened, and from this complication death ensued six days later. Mr. Matthey, assistant-surgeon to the infirmary, deposed that "if the finger had been amputated earlier a source of irritation would have been removed, and the lad would have had a better chance." This may or may not have been the event, but Mr. Matthey's opinion seems to have been based on the assumption that tetanus is due to irritation of the nerves in a wound, whereas the balance of evidence strongly supports the rival theory of blood infection. No doubt when gangrene has developed and its probable extent is indicated, the sooner the necrosed part is removed the better. At the same time it must be admitted out of simple justice to Mr. Hutchinson that he acted with reasonable discretion in waiting as he did before condemning the injured finger, considering the great vascularity of the parts and the high reparative power of the tissues in youth. It is very easy to find fault with a line of treatment that has failed, and to censure a medical man who has had the misfortune to lose his patient. In Mr. Hutchinson's case, however, we see neither carelessness nor wilful neglect of duty. A slight error of judgment there may have been; but surely this scarcely warranted the rider to the verdict of the jury that "Mr. Hutchinson was censurable in sending the case to the infirmary before first trying to obtain some local medical man to assist him in the operation which required to be performed." Had the patient died whilst under that gentleman's care, it is just possible that blame might have been imputed to the doctor for not availing himself of the resources which a hospital affords. The case is an interesting one, and, we doubt not, will be instructive to medical men holding union appointments.

SURGERY AND ROSE-COLOURED URINARY PIGMENTS.

THE urine of patients who have sustained injuries, or who have been submitted to surgical operations, sometimes exhibits a rose-coloured deposit which adheres to the glass vase, can be easily recognised with the naked eye, and is composed of a peculiar material. M. Verneuil is the author of the above statement (*La France Médicale* of May 2nd). This phenomenon accompanies the concentrated urine which follows injuries. It shows itself soon after the accident, is transient, and lasts from one to three days. It is related in some way to disease of the liver, and is especially liable to appear in the urine of alcoholic subjects. The subjects of this rose-coloured deposit are prone to secondary hæmorrhage and gangrene after traumatism. The strain in which M. Verneuil writes is one of novelty. We cannot believe that the "acid rosacique" to which he draws attention is an altogether unfamiliar object. Unless we are greatly in error, there should be nothing novel in the appearance of rose-coloured deposits in the urine of patients the subjects of hepatic disease, even in the absence of injury. Of the nature of the pigment we have yet to learn a great deal. The fact that hepatic disease is a serious complication of wounds has long been recognised. That rose-coloured urinary deposits specially indicate a tendency to secondary hæmorrhage and gangrene of wounds is a proposition which has probably not been hitherto distinctly formulated. We do not altogether fall in with the interpretation of the doctrines that M. Verneuil has brought forward, but we are convinced that the subject is one which will repay renewed attention.

NOT COCAINE.

COCAINE, the wonderful medicament which anæsthetises mucous membranes, and has simplified many minor operations on the eye, is very costly. Hence we must not be surprised to hear that, in Paris at all events, the manufacturers endeavour to obtain as much of the alkaloid as possible by submitting the coca leaves to a second process of exhaustion. The result is very similar to that which follows attempts to make a second infusion out of already exhausted tea leaves. Certain substances are extracted which are not cocaine, but have nevertheless a remarkable effect on the pupil, causing it to dilate in a marked manner. These substances are derivatives of hygrine, most of which are mydriatics. Eserine is not an efficient

antagonist to atropine, but it is to these derivatives of hygrine. Our readers may have observed that different observers have made different statements with regard to the action of cocaine on the pupil. Some have asserted that cocaine has a powerful mydriatic effect, which others have not noticed. The explanation appears to be rendered patent by the above-mentioned facts.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE quarterly meeting of the Medico-Psychological Association was held on May 8th, at Bethlem Hospital, Dr. Rayner, President, in the chair. There was a very numerous attendance of members, and the provisions of the new Lunacy Bill were discussed at some length, a very strong expression of opinion being elicited that the intervention of the magisterial authority (as provided in Clause 2) prior to the granting of an order for the treatment of a person of unsound mind, was undesirable, and would lead, if adopted, to delay in treatment, to attempts at evasion of the law, and other untoward results. It was, however, considered difficult to suggest any officials for carrying out the proposed provision other than those indicated in the Bill, but it was urged that the power of those authorities should be purely "ministerial," and that when any doubt arose on medical questions they should only have power to direct a further medical examination. It was reported that these and other points, including the desirability of protection to medical persons signing certificates of insanity, and more extensive provision for secrecy in examination, had been already brought under the notice of the Lord Chancellor by a deputation to his office. A committee was appointed to draw up a suitable resolution to be presented to the annual meeting, in the event of Lord Shaftesbury's resignation of the chairmanship of the Lunacy Commission being confirmed.

HOSPITAL SATURDAY IN BIRMINGHAM.

THE amount contributed to this fund up to the time of going to press was £5860 8*s.* 0*d.*, as against the total of £5410 5*s.* 7*d.* last year. It is expected that when the lists are complete, over £6000 will be realised, the largest amount since the institution of the movement, over thirteen years ago. No less than £489 2*s.* 2*d.* has been contributed by the operatives in three firms, whose names deserve special mention:—Kynoch's, £245 5*s.* 6*d.*; Nettlefold's, £139 2*s.* 8*d.*; Tangye's, £104 14*s.* The employées in the first (cartridge works) are chiefly females, while the third amount only partially represents what Tangye's engineering works have done for their local charities. They have additionally expended £124 16*s.* in the purchase of hospital tickets.

SYPHILIS IN RUSSIA.

HERZENSTEIN has brought out the first part of his work on Medical Geography and Statistics in Russia. This deals with Syphilis. He complains that many of the official statistical records are evidently of little value for scientific purposes; for example, the cases of syphilis in the Wilna government in 1877 were returned as 211 in hospital and 29 in private practice. In 1878 not a single syphilitic recruit was found in Livonia; and in the two years 1879 and 1880, of sixty-three recruits, only one was reported as syphilitic. In 1871, 275,761 working men were examined, and only 194 were found affected—numbers which are all of them obviously too low. He has made use of the best sources of information open to him, and has come to the conclusion that 2,000,000, or 2 per cent., of the inhabitants of Russia are syphilitic, and that of the 13,000,000 families it contains some 700,000 are tainted. The way in which the disease is spread is by peasants, who, leaving the country for the large towns in order either to work in factories or for military service, contract the disease, carrying it back to their villages when they return—whole families thus becoming affected.

NEGLECTED NUISANCES AND TYPHOID.

IF any point in the history of typhoid fever may be held to be established, it is the constant and essential relation which exists between that disease and the presence of sewage impurities. We cannot therefore but strongly condemn the blind neglect of cleanliness in a case which affords us the latest recorded illustration of this truth. The circumstances were the following: An inspector of nuisances at Darlaston was required by the Local Board of Health, at the instance of the medical officer of the Board, to clear away an accumulation of sewage matter at the back of a house in which there were four cases of typhoid fever. The medical officer and the Board in so doing were of course only taking the first essential step in the treatment of disease, the removal of its cause. The inspector, however, had other views. He saw no need for interference, and left matters as they were. Under such conditions no remedies could be expected to effect their purpose, and we are not surprised to learn that out of four persons attacked by the disease three died, an unusually high mortality for enteric fever. It must be evident to all that the censure which this official justly incurred at the hands of his employers is but a light one, unless it implies an assurance that like offences will be prevented in the future.

THE EDINBURGH GRADUATES' CLUB.

THE members of this Club assembled in great force on Wednesday evening at the Holborn Restaurant, under the genial presidency of the distinguished Rector, Sir Stafford Northcote. There were nearly one hundred members present. The Rector was supported on the right by Field Marshall Lord Strathnairn, and on the left by the new Principal of the University, Sir William Muir. There were also present the Lord Provost of Edinburgh, Sir Charles Nicholson, Professor Geikie, Professor Mackie, Dr. Haldane, and Professor Flower.

THE PNEUMONIA COCCUS.

L. BRIEGER has examined the coccus described by Friedländer as the excitant of the croupous form of pneumonia. It was cultivated with success in solutions of grape and cane sugar neutralised with lime, and containing fibrin and nutrient salts. The cultures, even after two months, when injected into the breasts of mice and guinea-pigs produced distinct pleuritic symptoms. The guinea-pigs resisted the effects strongly, few of them dying; their exudations contained cocci and minute rods in their characteristic capsules. There is nothing in the chemical constitution of the cocci to account for their virulent character. The author tried to produce ptomaines from pure cultures, but without success.

SOAP IN BLOOD.

F. HOPPE-SEYLER, in the *Zeit. Physiol. Chem.*, states that a soda soap exists in the serum of blood and of chyle, and that it may be obtained by precipitation with alcohol and subsequent evaporation at a low temperature. Blood serum of the ox, horse, and dog contains 0·05 to 0·12 per cent. of the fatty acids of soap; human chyle 0·23 per cent. of soap and 0·723 of fat. Blood serum in a case of pneumonia contained 0·662 fatty acids of soap. The origin of soap in these fluids has not as yet been accounted for.

NITRITE OF AMYL IN SOUTH-AMERICAN INTERMITTENT FEVERS.

IN a paper on nitrite of amyl in *El Ensayo Médico* of Caracas, Don José Gomez Rosende says that in intermittent fevers, if administered in the first stage, it certainly stops the cold stage, and that when the hot stage comes on, followed by sweating, it brings the pyrexia to an end. It is, however, by no means to be looked upon as a specific or as a substitute for quinine, though it has the power of controlling the most distressing symptoms of these fevers.

THE TEETH IN MORPHIOMANIA.

As the result of a careful investigation, M. Combes has arrived at the conclusion that the chronic ingestion of morphia leads to rapid decay of the teeth. The disease appears first in the enamel of the teeth, and the large molars are the first to be affected; the small molars are next diseased; then the incisors suffer, and last of all the canines. As the enamel is insensitive, and as there is no periostitis, the disease makes rapid progress without causing much pain. The effect of morphia on the sensory nerves should also be borne in mind. The hair falls off at the same time that the teeth decay in morphiomaniacs.

THE SANITARY CONFERENCE.

FRANCE will be represented at the International Sanitary Conference at Rome by Drs. Brouardel, Proust, and Rochard; and Abbate Pasha, an Italian physician on the Khedive's staff, has been selected to represent the Egyptian Government.

SIR WILLIAM JENNER.

WE are happy to announce that Sir William Jenner has quite recovered from his attack, and has gone to the seaside for a fortnight.

DESPATCHES from Sawakin announce that at the H Redoubt there are now in hospital 169 non-commissioned officers and men. The total number of deaths have been 13. Up to the 6th inst. there had been 83 cases of dysentery and 27 of enteric fever admitted. At the auxiliary hospital on Quarantine Island Surgeon Major Corry had on the 6th inst. 97 non-commissioned officers and men, 18 of whom were suffering from dysentery and diarrhœa and 12 from fevers. The hospital consists of four well-ventilated wooden huts with a capacity for 100 beds.

DR. G. H. R. DABBS, medical officer of health for Shanklin, Isle of Wight, has, in his report for 1884, expressed his willingness to advise, unofficially, local builders on any points connected with sanitary arrangements of new houses or the alterations of existing systems. Dr. Dabbs' example in this respect might, we think, be usefully followed in other districts.

THE Royal Academy of Medicine of Rome has addressed a letter of thanks to Prince Alexander Torlonia for his munificent present to the city of a surgical amphitheatre and thirty beds, completely equipped. Professor Mazzoni, lately deceased, was the Prince's adviser in the erection of the institution, which is specially devoted to major surgery.

THE International Board of Health in Constantinople has, with a view to obviate the dangers of infectious disease in case of the outbreak of war, telegraphed to Dr. Jablonowski, who has been commissioned to study the plague on the Persian frontier, to remain there, and if necessary to take the requisite sanitary measures.

SKATOLECARBOXYLIC ACID is said by E. Salkowski, in the *Zeit. Physiol. Chem.*, to form a regular constituent of urine in cases of peritonitis and inflammation of the ileum, and that when present it can be detected with great ease.

THE congress of the French Association for the Advancement of Science will this year be held at Grenoble, the opening of which will take place on the 13th of August next, under the presidency of Professor Verneuil.

DR. SACHARJIN, Professor in the Therapeutical Clinic at Moscow, has given 1200 roubles out of the yearly proceeds of his post to the administrative authority of the university, to be applied to the assistance of poor students.

DR. LEGOUEST, Inspector-General of Military Hospitals, has been placed on the retired list, and is succeeded by Dr. Didiot, Inspector-General attached to the Medical Department of the offices of the Minister of War.

PROFESSOR HYRTL, who from 1847 to 1874 occupied the chair of Anatomy at the University of Vienna, celebrated on March 24th the fiftieth anniversary of his graduation as Doctor of Medicine.

THE Rajah of Sarawak has appointed C. G. R. Storie, M.B., C.M., to be Principal Medical Officer to the Sarawak Government, in place of Dr. E. P. Houghton, retired.

THE Prince of Wales has been pleased to appoint John Lowe, M.D., late of King's Lynn, to be an Honorary Physician to His Royal Highness.

DR. MÜNCH, Professor of Pathological Anatomy in Kieff, has gone to Tashkent, Khiva, and Kokhand for the purpose of studying leprosy.

CHOLERA is stated to have broken out in Rangoon, and the daily return shows an increasing number of deaths.

DR. BURNEY YEO has been appointed Professor of Clinical Therapeutics in King's College, London.

THE eleventh congress of the Italian Medical Association is to be held in Perugia next November.

CHOLERA CONFERENCE AT BERLIN.

IT will be remembered that in July last a conference on cholera was held at Berlin, under the presidency of Professor Virchow, which was opened by an address by Dr. Koch upon his researches in India and Egypt, and was occupied with the discussion of most of the important questions concerning the origin and dissemination of the disease. At the close of the session it was resolved to assemble again in the present year, and last week the meetings were held.[1] In addition to those who took part in the previous conference there were present Herr Kochler, the Director of the Imperial Board of Health, Dr. v. Pettenkofer of Munich, and Dr. Günther of Dresden. The proceedings opened on the 4th inst., the first point for discussion being the experience obtained since the last session upon the cholera bacteria, with especial reference to their durability.

Professor KOCH, who opened the discussion, referred at

[1] See Deutsche Med. Wochenschrift, May 7th, 1885, and Berliner Klinische Wochenschrift, May 11th, 1885.

first to the accounts published since the last conference. He criticised the statements of Finkler and Prior, Klein and Emmerich, and reaffirmed the fact that the comma bacillus was peculiar to cholera, and was never absent from it. As confirmatory of this, he described the results of his examinations of cover-glass preparations of choleraic intestinal contents sent to him from Calcutta, and showed that the cultures of the comma bacillus obtained from France, Italy, and Germany were absolutely identical. He considered it proved that the comma bacillus occurs exclusively in cholera, that it is readily distinguished from other bacteria, and therefore of diagnostic value. He has performed a large number of experiments upon guinea-pigs, which were given five cubic centimetres of a 5 per cent. soda solution, followed in twenty minutes by an injection into the stomach of ten cubic centimetres of broth containing comma bacilli; laudanum was injected into the abdominal cavity immediately afterwards; the animals remained narcotised for about an hour, and then completely recovered. On the following day they appeared ill, their coats became rough, they became very feeble, and died in from one to three days. The small intestine was found to be swollen, and, together with the stomach and cæcum, was filled with an alkaline, colourless, flaky fluid, which contained a pure culture of comma bacilli. The use of the soda solution and opium had been found to render the animals more susceptible to the pathogenic action of bacteria generally; and the same experiments, although in smaller degrees, succeeded with Finkler's and Denecke's bacillus. But in these latter experiments other phenomena were present—e.g., the Finkler bacillus caused putrefaction, as the odour of the intestinal contents proved. It was fo. id that the administration of large doses of calomel or the use of naphthaline prolonged the life of the inoculated animal for about a day. The comma bacillus is readily destroyed by drying, and by certain disinfectant agents—e.g., carbolic acid in a half per cent. solution. That the human being could be infected was proved by one of the 150 medical men who attended the course at the Hygienic Institute becoming attacked with cholerine. Comma bacilli were found in the dejecta from this case, and pure cultivations were made. Experiments were also made to determine the durability of the comma bacillus in various media; this was found to be thirty days in spring water, seven days in drain water, twenty-four hours in sewer contents, three to four days on damp linen, eighty-one days in the harbour water of Marseilles (Nicati and Rietsch), and 144 days on agar-agar. A permanent form resembling the spores of other bacteria could not be ascertained.

Professor von PETTENKOFER said that he was not convinced; the experiments on animals were very insufficient, and better results had been obtained by Emmerich, who had brought cultures of bacilli to Munich from Naples. The mode of inoculation upon guinea-pigs practised by Koch did not explain how human beings were infected by cholera. He was unable to regard the comma bacillus as the causal agent of cholera, but considered it far more probable that certain conditions were induced by cholera favourable to the development of the comma bacillus. It was a straining of epidemiological experience to regard the comma bacillus as the cause of cholera; for whereas the bacillus is destroyed by dryness, the dry season in Lower Bengal favours cholera. Then the comma bacilli were present only in the intestine, and not in the organs; and it had to be supposed that they caused the production of a powerful poison in the cholera intestine, which has so little power of absorption. Such, however, could not be proved in the experiments conducted at Munich. Cholera does not seem to be a combination of infection and intoxication, but a purely infective disease. The future must decide whether Emmerich's rods are the actual excitants; they are found in organs, as cultivations proved, although not detectible in microscopical sections. Animals infected with them died with vomiting and diarrhœa, as in cholera. But whatever the verdict as to the bacilli, there must first be established a conformity with epidemiological facts. If cholera patients are not directly infected, then the cholera fungus can have no share in inducing the disease; and if cholera is dependent upon conditions of locality and season, then also a cholera fungus cannot determine it.

Dr. B. FUNKEL mentioned that the only bacterium of the intestine which had a morphological similarity to the comma bacillus was a comma-shaped vibrio occurring in the mouth. Like many others, he had attempted to cultivate this organism, which Dr. Koch had shown at the second sitting of the previous conference, and he could positively affirm that it does not grow in gelatine media.

Professor KOCH, replying to Professor Pettenkofer's arguments, pointed out that the methods employed by Emmerich were open to objection and to error. There was no analogous instance whatever of a bacillus being secondary to a disease with which it was solely associated. The dry season in Calcutta does not make the town dry, but diminishes the rich water-supply of the place. Opposed to the failures at Munich to obtain a poison from pure cultures of the comma bacillus were experiments (not yet concluded) which he was making, giving positive results. Cholera was never, like anthrax and small-pox, disseminated by dry conditions, and experience was opposed to there being a permanent state of the bacillus.

The debate was resumed on the following day (May 5th) by Professor von PETTENKOFER, who pointed out that many facts were unexplained by the doctrine that the comma bacillus or Emmerich's bacillus was the cause of cholera—e.g., the latency of an epidemic during winter, its recurrence and its acknowledged dependence on time and place. He compared cholera to malaria, which, although communicable by inoculation, still depends upon conditions of soil. A distinction should be made between artificial and natural infection, for it cannot be thought that an epidemic occurs in the same manner as experimental infection.

Professor VIRCHOW said that experiments upon animals were not absolutely necessary. The animals infected by Emmerich's fungus showed phenomena which were readily mistaken for those of cholera, but many substances could excite similar symptoms. Thus, in 1847 he had produced choleriform symptoms and lesions in dogs by the injection of putrid material into the blood; and he was therefore led to compare cholera with putrid infection, not however considering them to be identical. In Koch's experiments the opium may have prevented diarrhœa and vomiting, and therefore the experiments were in a sense defective, and would have to be repeated. Emmerich, by cultivating his bacilli in blood from a living vein may have obtained an accidental form. The constant occurrence of Koch's bacillus in the intestine, the special seat of cholera, was in favour of his view. The gastric secretion is not invariably acid, and therefore dyspeptic conditions might render a previous preparation of the animals superfluous. In these diseases—as muscardine or the potato disease, the fungoid nature of which had long been known—it was still a question why an epidemic arises and why it disappears. In spite of the knowledge gained respecting morbific fungi, but little progress had been made in explaining the cause of epidemics. Although the comma bacillus had no permanent form, yet it had a certain duration of life, for Dr. Babes had found cultures to retain their viability at the end of six months, and had procured a specially large form of vegetation composed of broad, longitudinally striated spirilla that was very durable; it was produced by exposure to low temperatures, but could readily develop into short comma-shaped forms. But the form of the bacillus varies with varying external conditions. The vesicular forms of Ferran, described as evolved from the spirilla, are degenerate and sterile. The prolongation of epidemics from year to year is sufficiently explained by the duration of life of the bacillus; and in other directions the discovery of this organism was a positive gain to knowledge. It was not opposed to former experience, especially that derived from the meritorious labours of von Pettenkofer; but too profound a penetration into theoretical speculations must be avoided.

Professor HIRSCH remarked that epidemiological inquiry was at least of as much importance as bacteriology in reference to the course of epidemics and to prophylaxis.

Drs. KOCH, PISTOR, von PETTENKOFER, and VIRCHOW made some further observations on the point; and the Conference next discussed the question of the spread of cholera by human intercourse, pilgrimages, and by ships. This was opened by Professor Koch, who instanced the spread of cholera in India by pilgrimages, gave examples of ship epidemics of long duration, and showed how unreliable were the accounts given by sailors.

Professor von PETTENKOFER assigned little importance to pilgrimages and railway intercourse, and urged caution in accepting statements of the transmission of cholera by travellers. At this point the debate was adjourned, a demonstration being given of guinea-pigs (living and dead) infected with comma bacilli.

At the third sitting on May 6th, the debate on the second point was resumed, together with that on the third—viz., the influence of soil, air, and water.

Dr. GÜNTHER of Dresden adduced evidence from Saxony to show that human intercourse does not suffice to disseminate cholera at all times and under all circumstances, but that a seasonal and local disposition is necessary for the occurrence of an epidemic.

Professor HIRSCH remarked that human intercourse did not invariably determine the spread of cholera, but that cholera is always spread through human intercourse.

Professor KOCH, alluding to the demonstration of the previous day, said that of fourteen guinea-pigs inoculated on the 4th inst. only two had survived, and suggested that, as with other plants, the cholera fungus may find temporarily conditions favourable to its existence, afterwards perishing for lack of these conditions. He cited instances in proof of an acquired immunity against cholera, and of its spread by pilgrims, travellers, and troops. Proof of such dissemination could not be expected in all instances, but we must be content to establish it indubitably in certain cases. The fact was of the highest importance in view of the prophylactic measures to be taken by authorities. The long duration of cholera on shipboard could not be explained by regarding the soil as the sole condition of its origin, but could be accounted for on the view of transmission from man to man, for the incubation period of cholera is very short.

Dr. GÜNTHER said that the incubation period usually lasted for four days, but he knew of cases where it was from ten to seventeen days.

Dr. MEHLHAUSEN cited instances of the spread of cholera by troops, and Drs. EULENBERG and HIRSCH gave similar examples of its spread by rafts.

Professor von PETTENKOFER did not deny the fact of an acquired personal immunity after an attack, but asserted that it was the local immunity which determined the occurrence of an epidemic. The disposition of a locality for epidemics consists in part of local constant conditions, in part of local transitory (seasonal) factors. He by no means denied the influence of human intercourse in the spread of cholera; but this alone does not suffice to evoke an epidemic. Local and seasonal influences must determine this. He did not know how the infective germ gets on board ship; but the mere shipment of a patient is not sufficient to cause the disease to spread.

Professor VIRCHOW said that the supporters of the contagionist doctrine did not admit that direct transference from man to man must of necessity occur; that is proved by infection through cholera linen, still more by the pure cultures, in which the development and sustenance of cholera germs take place outside the human body. But just as certainly did these cultures show that it is not in the earth where these germs are able to thrive. Up to the present not a single case was known where the existence of cholera germs in the soil had been proved. He would not deny the possibility, but he disputed the exclusiveness of the soil theory. Experiment and observation of separate cases yield more certain conclusions than whole epidemics, which were only considered on a large scale. He had personal knowledge of the transference of cholera from man to man in 1871, and had published a conclusive observation in his collected works. In a prison, which at the time was free from cholera, three men were attacked who had charge of a case of cholera which had been admitted. Cholera was transmitted on board ship which had nothing to do with the soil—e.g., the Stetten Transatlantic steamer *Franklin*. Although no doubt can exist that the spread of cholera is not dependent on a poison or germs arising from the soil, still, what is as yet known of the history of the comma bacillus does not exclude the possibility of its developing and thriving in the soil under certain conditions. He, therefore, saw no difficulty in agreeing with Professor von Pettenkofer provided that he abandoned his exclusive standpoint.

Professor von PETTENKOFER said that originally he accepted contagion as the chief factor, but observation of the varying behaviour of cholera, according to locality and period, obliged him to lay especial stress on the chronological and local factors.

Dr. MEHLHAUSEN related an undoubted instance of communicability of cholera from person to person observed in Thorn in 1873.

(To be continued.)

THE ANCIENT AND MODERN METHODS OF TREATING EPIDEMICS OF SMALL-POX IN INDIA.

SURGEON-MAJOR ROBERT PRINGLE, M.D., read a paper on the above subject at the rooms of the Society of Arts on May 8th. He drew attention to the ancient method of treating epidemics of small-pox in India, which was that of inoculation, while the modern, as was to be expected, was Jenner's great discovery of vaccination. The details given by Dr. Pringle of the practice of inoculation in India were the result of continuous personal observation during the past twenty years, in the independent native State of Tirri Ghurwâl, in the Himalayas. Here it would appear that inoculation had been practised from, what might be termed, time immemorial. After giving the details of the operation, Dr. Pringle entered into full particulars of the benefits of this practice. These he described as visible benefits, and compared them with the effects of spontaneous small-pox in the plains at the foot of the Himalayas, where no inoculation was practised, and before vaccination could have made any impression on the adult population. In accounting for the remarkable difference between the visible effects of spontaneous small-pox, as met with in the plains of Hindoostan, and those seen in the cases of inoculated small-pox in the Himalayas, Dr. Pringle remarked that, in his opinion, it would seem to be due, on the part of the inoculators, to what he termed accidental cultivation of the product of the spontaneous small-pox eruption, to a considerable extent on the lines of M. Pasteur's recent discoveries. The process of this accidental small-pox cultivation consisted in the lymph being carried on through many transmissions till the cultivated product resembled in its action cow-pox lymph, and only produced local symptoms at the point of insertion, or else, so rarely a small-pox eruption, as to make its appearance quite exceptional—thus corresponding in a remarkable manner with the common and destructive outbreaks of sheep-pox and the rare and mild cases of cow-pox. In 1864 Dr. Pringle inaugurated the present system of voluntary vaccination in the Mesopotamia of the Ganges and Jumna, from fifty miles above their junction at Allahabad to their sources in the Himalayas. In alluding to this modern prophylactic for small-pox, he confined his remarks to the points in which the practice of vaccination differs in India from that carried on in this country. These he summed up under the head of climatic causes, which, owing to the high temperature met with in the plains of Hindoostan from April to October, limited the practice of vaccination to the cold weather months—viz., from the middle of October to the middle of March. Thus, out of the twelve months, there were only five in which vaccination could be practised; and this led him to describe the means he adopted to keep up the supply of vaccine lymph in the Himalayas, in what he termed "lymph nurseries." Latterly, by retrovaccinating—i.e., vaccinating a calf and taking the lymph from the eruption—Dr. Pringle has succeeded in making his sanitary circle, with its population of ten millions, and other circles of similar extent, independent of any supplies from the National Vaccine Establishment. In comparing the two prophylactic measures, Dr. Pringle pointed out that, while the practice of inoculation no doubt kept up the disease of small-pox, and was dependent on its presence for the virus required for the operation, yet, even imperfectly as it was carried on, it was nevertheless a very great boon to the population, as it could be practised throughout the year. In the practice of inoculation, he said, the repetition of the operation at any future period of life was never thought of, and in this, according to the generally, and indeed latest, received view of vaccination, it was, in his opinion, far superior to vaccination in countries like India. As regards revaccination, Dr. Pringle said had he considered revaccination necessary, he would never have spent twenty years of his life in a continuous effort to supplant inoculation without a repetition of the operation, with vaccination *plus* revaccination after a given number of years. In India at least, and most certainly not in his circle, with its ten millions, where, with two hundred operators working at nothing else but vaccination for five months, he could not reach half the annual birth-rate. He therefore discouraged revaccination in his circle, and made quality the basis of his work and not quantity, explaining

to his subordinates that if the former imparted the immunity claimed for it this result would quickly be followed by the latter. In concluding, Dr. Pringle illustrated the absolute necessity of carefully supervising any system of vaccination, both as regards the veracity of the returns submitted and the quality of the work, with reference to the knowledge and skill of the operators. In 1863 the vaccination in the second circle in the North-West Provinces was held up as a pattern to India, and yet within twenty years this system in the circle is stigmatised in a public document as a "wholesale fabrication of returns," while that in the first circle in the same report was stated to be such that the magistrate of a large district placed the following on record:—"I regret to record my conviction that these numbers are a wholesale imposition." Yet in twenty years Dr. Pringle's vaccination in this first circle, on the principle of quality, not quantity, was such that it was publicly commended by the Government in 1883, and a Mahomedan gentleman of influence, as the result of the benefits exhibited by this mode of work in his own district, with a population of over one million, brought into and carried through the Council of the Viceroy a Bill for compulsory vaccination in certain localities and under certain conditions. Dr. Pringle from the preceding aimed at showing that the cause of the failure of a system of vaccination, if carefully and fearlessly inquired into, will be found to lie, not in any imaginary deterioration in the vaccine virus, when proper care is taken, nor yet in a diminution in the protective power of really good vaccination by the lapse of years, or in the neglect of revaccination; but to what the Government of the North-West Provinces recorded in 1883, in the case of the second sanitary circle, as *the inexcusable negligence of the supervising officials*, and in many other cases no doubt to the ignorance of the operators and the employment of stored lymph (for which no one seems to be directly responsible), imparting a false protection, the result of a spurious vaccination.

THE INTERNATIONAL SANITARY CONFERENCE.

THE Roman papers announce that the Italian Government abstained from drawing up a formal programme for the Sanitary Conference which assembles in Rome to-day (15th inst.), acting on the precedent of the Constantinople Conference, which entrusted a committee selected from among its own members with the task of framing the programme of its labours. However, Signor Mancini, Minister of Foreign Affairs, in a recent circular to the Powers to be represented at the Conference, formulated a summary of the intentions of the Italian Government as to the Conference in question. According to this circular, the Conference is designed to have a twofold purpose—the one technico-scientific, the other diplomatico-administrative. The Roman Conference would be able to examine the findings of the preceding sanitary conferences, notably that of Vienna, in order to see what conclusions are worth maintaining, what are to be modified, what to be suppressed. As for the diplomatico-administrative part, the Conference, examining the question of the preventive measures which may be adopted with due regard to the interests of commerce, and to the freedom of inter-communication, would have to fix the basis of an international accord, which should be acceptable to all the Governments, for extinguishing contagious diseases, while laying down rules, based on uniform principles, as well for quarantine as for any other system of protection. It is understood, however, that the treatment of the negotiations already in progress as to the composition and attributes of the Sanitary Council in Egypt must be reserved and kept separate, the Conference having it in its power to avail itself at an opportune time of the conclusions of that particular transaction. Finally, the Conference might be able to define practical rules for the immediate application of the international system of sanitary directions counselled by the Washington Conference, as well as the mode of establishing in convenient localities an official agency for arriving at accurate sanitary information, and transmitting the same to the Governments forming part of an International Sanitary Union to be constituted according to the attributes and criteria which the Conference should determine. This, however, would have absolute freedom of initiation and of deliberation—in other words, complete liberty of action.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Leicester (Urban).—Dr. Johnson's report upon the health of this borough during 1884 is largely devoted to the consideration of the waste of infant life, which has so long been the prevailing feature of the vital statistics of this town, and which showed an exceptional excess last year. With regard to the present population of the borough, the medical officer is of opinion that the Registrar-General's estimate, based upon the hypothesis that the rate of increase since 1881 has been the same as that which prevailed during the last intercensal period, 1871-81, considerably exceeds the true number. It is pointed out, in support of this opinion, that the births recorded in recent years have shown no increase; indeed, the number in 1884 was somewhat below that in 1880. Dr. Ogle, of the Registrar-General's office, also showed, in a letter which Dr. Johnson prints in his report, that if the rate of increase of population in Leicester since 1881 has been the same as that of inhabited houses on the rate-book, the population in the middle of 1884 was 127,929, and nearly 5000 less than the estimate by the Registrar-General's usual method. Dr. Johnson, in his report, has adopted this lower estimate, which makes the death-rate in the borough last year 22·9, instead of 22·1 as reported by the Registrar-General. This rate shows an increase of 3·7 upon the low rate in 1883, but was slightly below the mean rate in the eight years 1875-82. It may be noted, however, that, while adopting a revised population for 1884, Dr. Johnson has not corrected his rates for recent years, and that the rates given for the five years 1875-79 in Tables I. and IV. differ widely. The death-rate in Leicester last year from the principal zymotic diseases was, according to the Registrar-General, 4·03 per 1000; but it is worthy of note that the mortality from each of these diseases was below the average rate in the twenty-eight towns, except that from diarrhœa, which was more than double the average rate. Dr. Johnson attributes the startling mortality from summer diarrhœa in Leicester to "introduction into the system, by means of air or in food, of living organic ferments derived from the putrefactive decomposition of animal refuse matter retained in many of the town sewers, and present also through soakage in the adjacent subsoil." Infant mortality in Leicester last year, measured by the number of deaths under one year to births registered, was equal to 233 per 1000, against a mean of 168 in the twenty-eight towns. This excess was only in part explained by the marked diarrhœa mortality, as the deaths referred to atrophy, debility, premature birth, and convulsions also showed a marked excess. No health report of a large town or community is complete which does not show the death-rates of males and females at five or more groups of ages, calculated upon the numbers living at the same ages. This information is especially necessary in the case of Leicester, and would help to throw light upon the causes of the high rate of infant mortality from which the town has suffered for so many years. No such information is, however, given in the report before us. Scarlet fever has been more or less fatally prevalent in Leicester during the last five years, and 63 deaths resulted from this cause last year, of which 16 occurred in the Fever Hospital. Dr. Johnson points out that without more general and ready use of the fever hospital accommodation provided by the sanitary authority, success in "clearing the town from this lingering pestilence" is unattainable. Bearing in mind the unsatisfactory condition of the subsoil, and the suggested connexion between this defect and the excessive mortality from diarrhœa, the fact that upwards of 1200 houses in the town still derive their water-supply from surface wells suggests a source of grave danger to the health of the town.

Lincoln Urban District.—A somewhat exhaustive report has been submitted to the Corporation by Dr. C. Harrison, medical officer of health and public analyst, respecting the water-supply of the city. The report sums up in a very clear manner the considerations which should influence a body having charge of the public health, and who supply to the population a water-supply derived from such a source as the river Witham. Dr. Harrison explains that the water after filtration as now supplied contains an excess of

organic matter, making it only a second-class water. The sources of the water are polluted by drainage from land highly cultivated and occasionally manured by nightsoil, and he asserts that water from such a source must be dangerous. There are filter beds capable of filtering more than a million gallons daily, but the conclusions arrived at are that the quantity available is not sufficient for the wants of the city, and that it is not advisable that the supply should be taken from the river. Putting aside the unfavourable chemical condition of the water, we certainly concur in Dr. Harrison's opinion that a river receiving drainage and effluent from a large town could not with any degree of safety be used for domestic purposes. Indeed, as he asserts, it is unwise and dangerous to take water from a source known to be polluted or liable to pollution, and then to trust to the purifying effects of filtration to render it safe for consumption.

Wolverhampton Urban District.—During 1884 small-pox became very prevalent in Wolverhampton, and it was found necessary to fit up a house known as Holly Hall as a temporary infectious hospital. Of a total of 37 vaccinated patients, 1 case terminated fatally; whereas of 6 unvaccinated, 4 died. Not a case was known to have occurred in any revaccinated person. The town also suffered severely from measles. So, also, 212 cases of scarlet fever were heard of, and Dr. Malet explains that the efforts to check the spread of this disease were most disheartening. It is a question, however, how far this may have been due to the circumstance that no proper means of isolation are provided for the borough, the sanitary authority still relying on the isolation wards of the General Infirmary for this purpose. Such an arrangement as this has nowhere been found to serve the purposes of a properly organised hospital with its accessories, established and maintained by the sanitary authority. Open middens and cesspits of the worst type still prevail in the borough; underground soft-water tanks, discharging their overflow without disconnexion into the drains, are almost universally resorted to; and in some parts the condition of houses, closets, and courts is such as to merit the term "beastly" in point of filth. A first step towards a remedy has, however, been taken in the investigation and exposure of this state of affairs, and it may be hoped that decided action will soon follow. The deaths included 5 from small-pox, 98 from measles, 37 from scarlet fever, 6 from diphtheria, 21 from non-spasmodic "croup," 12 from continued fever, and 140 from diarrhœa. The general death-rate was 22·2 per 1000.

Isle of Wight Rural District.—In submitting his first annual report on this district, Dr. Groves deals at some length in a description, topographical and geological, of the localities comprised within its area, and he then considers the character of the different water-supplies, especially from the geological point of view. Detailed observations of rainfall and temperature, together with an account of the climate of the island and of the features by which it is influenced, and other matters of extreme interest follow, before the usual sanitary report is commenced. The birth- and death-rates for 1884 were 27·5 and 13·6 per 1000 respectively, and the rate from the principal zymotic diseases was 1·2. Some voluntary notification of infectious diseases is made, and this has sufficed to show the great need of an isolation hospital for sanitary purposes. A cottage is suggested as sufficient to form a nucleus, but probably one of the special pavilions recently designed by the Local Government Board for small localities would better answer the purpose. Plans of these were recently submitted to the Epidemiological Society. The general sanitary circumstances of the rural district, as to water, closets, sewers, drains, piggeries, &c., are next entered into at some length, and it is evident that the island is by no means so free from real danger to health as its many visitors imagine. Rarely, we are told, are the most elementary precautions taken to protect the shallow wells; it is simply a matter of haphazard whether they become polluted or not. Polluted streams and brooks are also resorted to as water-supplies. When Dr. Ballard reported to the Local Government Board some years ago on the state of the island many grave sanitary defects were exposed, but we had hoped that they had before this been remedied. At that time the sanitary organisation was very defective, but it is now evident that, so far as the rural portion of the island is concerned, the authority does not lack a skilled and competent adviser, and we trust that his future reports will show that the sanitary defects he points out will have been removed.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5558 births and 3440 deaths were registered during the week ending the 9th inst. The annual death-rate in these towns, which had been equal to 23·4 and 21·1 per 1000 in the preceding two weeks, further declined last week to 20·2, and was lower than in any previous week of this year. During the first five weeks of the current quarter the death-rate in these towns averaged 22·6 per 1000, against 23·5, the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 13·0 in Plymouth, 14·1 in Brighton, 15·2 in Bolton, and 15·3 in Hull. The rates in the other towns ranged upwards to 26·4 in Oldham, 26·4 in Blackburn, 28·6 in Preston, and 36·8 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 529 and 449 in the preceding two weeks, were 481 last week; they included 181 from measles, 116 from whooping-cough, 36 from scarlet fever, 37 from "fever," (principally enteric), 33 from diphtheria, 30 from diarrhœa, and 48 from small-pox. No death from any of these principal zymotic diseases was returned last week in Brighton, whereas they caused the highest death-rates in Sunderland, Blackburn, and Newcastle-upon-Tyne. The greatest mortality from measles was recorded in Sunderland, Cardiff, and Newcastle-upon-Tyne; whooping-cough in Preston, Plymouth, and Blackburn; scarlet fever in Sunderland and Salford; and "fever" in Norwich. The 33 deaths from diphtheria in the twenty-eight towns included 24 in London, 3 in Liverpool, and 2 in Oldham. Small-pox caused 71 deaths in London and in its outer ring of suburban districts, 2 in Manchester, 1 in Liverpool, and 1 in Sunderland. The number of small-pox patients in the metropolitan asylum hospitals situated on and around London, which had been 1034 and 1282 on the preceding two Saturdays, further rose to 1361 at the end of last week; the admissions, which had been 246 and 354 in the previous two weeks, were 315 last week. The Highgate Small-pox Hospital contained 81 patients on Saturday last, 14 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding four weeks from 512 to 337, further fell last week to 287, and were 75 below the corrected weekly average. The causes of 73, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Leicester, Newcastle-upon-Tyne, and in eleven other smaller towns. The largest proportions of uncertified deaths occurred in Liverpool, Salford, Oldham, and Bristol.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had steadily declined in the preceding five weeks from 25·0 to 22·4 per 1000, further fell to 20·6 in the week ending May 9th, and was but 0·4 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 12·9 and 15·7 in Leith and Dundee, to 23·7 in Paisley and 24·3 in Glasgow. The 504 deaths in the eight towns included 25 which were referred to whooping-cough, 13 to measles, 6 to diarrhœa, 5 to diphtheria, 3 to scarlet fever, 3 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 55 deaths resulted from these principal zymotic diseases, against 81 and 64 in the preceding two weeks. These 55 deaths were equal to an annual rate of 2·3 per 1000, which was 0·5 below the mean rate from the same diseases in the twenty-eight English towns. The deaths from whooping-cough, which had been 30 and 27 in the previous two weeks, further declined to 25 last week, and included 12 in Glasgow and 6 in Edinburgh. The 13 fatal cases of measles also showed a further decline from recent weekly numbers; 11 occurred in Glasgow and 2 in Greenock. Five of the 6 deaths from diarrhœa, 3 of the 5 from diphtheria, and 2 of the 3 from scarlet fever were returned in Glasgow. The 3 deaths referred to "fever" were fewer than in any recent week; 2 occurred in Paisley and 1 in Dundee. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 131, 118, and 124 in the preceding three weeks,

declined to 117 last week, and were 5 below the number returned in the corresponding week of last year. The causes of 79, or 15 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 34·0 and 33·5 per 1000 in the preceding two weeks, further declined to 28·5 in the week ending the 9th inst. During the first five weeks of the current quarter the death-rate in the city averaged 32·4 per 1000, the mean rate during the same period not exceeding 21·3 in London and 18·7 in Edinburgh. The 193 deaths in Dublin last week showed a further decline of 34 from the high numbers in the previous two weeks; they included 12 which were referred to measles, 4 to whooping-cough, 2 to "fever" (typhus, enteric, or simple), 2 to diarrhœa, 1 to scarlet fever, 1 to "fever," and not one to small-pox. These 22 deaths from the principal zymotic diseases showed a decline of 18 from the number in the previous week, and were equal to an annual rate of 3·3 per 1000, the rate from the same diseases last week being 3·1 in London and 1·5 in Edinburgh. The fatal cases of scarlet fever in Dublin, which had been 15 and 17 in the previous two weeks, declined to 12 last week The deaths from scarlet fever, "fever," and diarrhœa also showed a considerable decline. Five inquest cases and 5 deaths from violence were registered last week, and 63, or nearly a third of the deaths, were recorded in public institutions. The deaths of infants showed a marked decline. The causes of 43, or more than 22 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Deputy Surgeon-General George Stewart Watson Ogg, of the Madras Medical Department, principal medical officer of the Hyderabad Subsidiary Force, has been selected for the chief medical charge of the Quetta Field Force.

INDIA OFFICE.—The Queen has approved of the following promotions among the officers of the Staff Corps and Indian Military Forces made by the Government in India:—Deputy Surgeon-General Benjamin Simpson, M.D., of the Bengal Medical Establishment, Deputy Surgeon-General Michael Cudmore Furnell, M.D., of the Madras Medical Establishment, and Deputy Surgeon-General William James Moore, C.I.E., of the Bombay Medical Establishment, to be Surgeons-General. Brigade Surgeon John Brake, of the Bengal Medical Establishment, and Brigade Surgeon John McNeale Donnelly, M.D., of the Madras Medical Establishment, to be Deputy Surgeons-General. Surgeon-Major George Sackville Sutherland, M.D., and Surgeon-Major Emanuel Bonavia, M.D., of the Bengal Medical Establishment, Surgeon-Major William Frederick De Fabeck, M.D., of the Madras Medical Establishment, and Surgeon-Major Edward Harley Raynsford Langley, of the Bombay Medical Establishment, to be Brigade Surgeons.

ADMIRALTY.—The following appointments have been made:—Fleet Surgeon John Thomson Comerford, to the *President*, additional; Fleet Surgeon John S. Dobbyn, M.D., to the *Repulse;* Fleet Surgeon James W. Fisher, M.D., to the *Hercules;* Staff Surgeon Solomon Kellett, to the *Rupert;* Surgeon George W. Low, to the *Ganges;* Surgeon Thomas R. Pickthorne, to the *Excellent;* and Surgeon James C. Dow, to the *Pembroke*.

ARTILLERY VOLUNTEERS.—1st Renfrew and Dumbarton: Surgeon William Aitchison Wilson, M.D., is granted the honorary rank of Surgeon-Major; Acting Surgeon James Finlay, M.D., resigns his appointment; William Robert Sewell, Gent. M.D., to be Acting Surgeon.—1st East Riding of Yorkshire: Major William Henry Marwood resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Corps on his retirement; Thomas Tinley, Gent., to be Acting Surgeon.—1st Argyll and Bute: David Macneilage, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—3rd (the Buchan) Volunteer Battalion, the Gordon Highlanders: Acting Surgeon George Innes Fraser, M.D., resigns his appointment; Adam Blackhall, Gent., M.D., to be Acting Surgeon.—20th Lancashire (2nd Manchester): William Coates, Gent., to be Acting Surgeon.—1st Perthshire: William Haldane, Gent., M.D., to be Acting Surgeon.—1st Bedfordshire: Surgeon Charles Cyril Hicks, M.D., resigns his commission.—1st Cinque Ports: Honorary Assistant-Surgeon Charles Harris, M.D., resigns his commission; also is permitted to retain his rank and to continue to wear the uniform of the Corps on his retirement.—1st Elgin: George Hugh Mackay, Gent., M.B., to be Acting Surgeon.—2nd Volunteer Battalion, the Royal Welsh Fusiliers: Arthur Llewelyn Evans, Gent., to be Acting Surgeon.—2nd Volunteer Battalion, the Loyal North Lancashire Regiment: Surgeon John Grindall Brayton resigns his commission.—5th (Deeside Highland) Volunteer Battalion, the Gordon Highlanders: Acting Surgeon Hunter Urquhart Walker resigns his appointment.—7th Middlesex (London Scottish): George Ogilvie, Gent., M.B., to be Acting Surgeon.—2nd Volunteer Battalion, the East Yorkshire Regiment: Alexander Ferrier Angus Fairweather, Gent., M.A., M.D., to be Acting Surgeon.

Correspondence.

"Audi alteram partem."

THE TREATMENT OF SEPTICÆMIA BY IRON AND QUININE.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Jan. 17th last there is the record of a case of septicæmia treated by ammonia and chlorate of potash. The following case I desire to place in contrast.

Mrs. H——, aged twenty-two, was confined on Oct. 15th, 1884, after a very protracted labour of two days' duration. It was her first child, and she was delivered with the forceps. All seemed to go on well until the third day, when the temperature was found to be rising. On the 19th high fever developed, and the discharges were very foul. My directions as regards thorough cleansing of the genitals and injections of Condy's fluid into the vagina (as is my practice after all cases of instrumental labour) had not been carried out. There was, it should be observed, a tear of the mucous membrane, about an inch in length, but not very deep, on the posterior wall of the vagina. The evening temperature was 104·8°. I injected Condy's fluid into the fundus, and gave a mixture of steel and quinine every two hours. On the 20th the morning temperature was 101·7°. The fluid was again injected into the fundus, and followed by the injection of carbolic oil (1 to 10). Linen cloths in small pieces, dipped into the oil, were applied to the tear in the vagina, and the external genitals washed thoroughly with carbolic soap by the nurse. I gave directions that the linen rags should be changed three times a day and that the soap should be used every eight hours. Injections were repeated in the evening. On the 21st the morning temperature was 101·9°; evening, 101·7°. The injections of Condy's fluid were continued, but the carbolic oil injection was not used any further. On the 22nd the temperature throughout the day was 100·5°; and the respiration 23. On the 23rd the temperature in the morning was 100·4° and the respiration 22. The medicine was now taken three times a day only. On the 24th the temperature had fallen to 100° in the evening, and the patient expressed a wish to get up, but was ordered to keep her bed for a day or two. On the 25th the temperature in the morning was 99·4°, and fell on the 26th to 98·4°. She was now allowed to get up and go downstairs.

In Mr. Coffin's case, although no doubt the infective material was of a much stronger nature than that developed in this, the recovery seems slow in comparison. The temperature, he states, for six days and a half was over 105°, for nine days over 103°, and for eleven days over 102°. My patient was cured in seven days, and my sole object in recording the case is to speak of my theory of the nature of such cases, and the consequent indications as regards treatment, the more especially as Mr. Coffin speaks with considerable reserve in reference to his case.

As regards local treatment, my practice is to purify with Condy's fluid the whole genital tract, and then to inject carbolic oil of the strength of 1 to 10 into the fundus, afterwards applying the same, or else vaseline and iodoform, to any tears in the mucous membrane. The oil I employ as an injection once or twice only, keeping afterwards solely to Condy's fluid in warm water twice a day until the temperature becomes normal, or nearly so. As to consti-

tutional remedies, I consider the arrest of all such septic processes in the blood to be perfectly feasible. Avoiding ammonia, which is a powerful agent for the prevention of the formation of fibrin, and is thus useful (as has been clearly proved) when given to the blood-giver in cases of transfusion, I prescribe astringents and hæmatinics, such as iron and hydrochloric acid, along with germicides, such as quinine and chlorate of potash.

I argue that in puerperal septicæmia we have a disease in which every effort of nature for the prevention of absorption of infective material should be fostered and encouraged. The clots in the maternal sinuses formed on the separation of the placenta may be regarded as the natural barrier to any external morbific influence. The preservation, therefore, of their integrity until they become organised and contracted should be of paramount importance. Hence the advisability of avoiding agents which tend to soften and disperse fibrinous deposits and formations of this nature. Should infection by septic materials have occurred, the efforts of the physician should be directed to strengthen the fortifications raised by natural means, and this can only be effected by astringent and hæmatinic remedies, such as steel and hydrochloric acid, with the assistance of quinine and chlorate of potash, for the destruction of the germs which have found entrance to the circulation by means of the lymphatics. To give "liquefacient" remedies, such as ammonia, sodic salicylate, or potassic iodide, is, I think, simply to break down the natural barrier described, and to further absorption of septic materials by a diffused and weakened circulation—weakened by reason of its deficient fibrin-forming power. Infection of the blood, indeed, is thus doubly ensured by medicinal liquefaction and septic softening of clots, for wherever there is the development of sulphuretted hydrogen by decomposition of animal matter no fibrin can exist. I prescribe five-minim doses of the perchloride of iron, one-grain or two-grain doses of quinine, and five-grain doses of chlorate of potash, with glycerine in half-drachm doses, every two hours, until there is a considerable reduction in the temperature, when I order the mixture to be taken less frequently.

Similarly, I hold that the treatment of enteric fever should be conducted upon an acid and not an alkaline method. I believe I have seen an increased blood heat induced by such a remedy, for instance, as salicylate of soda in this disease, with passive pulmonic congestion, from a condition of over-fluidity thus induced, and quickly removed by the administration of fifteen-minim doses of hydrochloric acid every two hours, and drop doses of steel.

I am, Sir, yours truly,

C. R. ILLINGWORTH, M.D. Edin.

Clayton-le-Moors, March 23rd, 1885.

"TAURO-CHOLATE OF SODA PILLS."

To the Editor of THE LANCET.

SIR,—Please let me add to my little paper which appeared in your issue of the 25th ult., that it is better to use pig's-bile than ox-bile in preparing the tauro-cholate of soda; and that the *bulk* of the glyco-cholate—which is not of any therapeutic value—should be thrown out with acetate of lead, avoiding any excess of the acetate before evaporating the tauro-cholate to the consistency for making into pills. Keratin, easily made from the residue of an ethereal digest of horn shavings by boiling in liquor potassæ, forms the best coating.

I am, Sir, yours truly,

Hanover-square, May 13th, 1885. J. MORTIMER GRANVILLE.

"THE COLLOQUIAL LINGUISTIC FACULTY."

To the Editor of THE LANCET.

SIR,—If I may judge by the considerable extract you have given from Dr. W. H. Walshe's new work, reviewed in the current number of THE LANCET, he has raised the novel and very interesting question, "When may a person properly be said to know a foreign language?" But I fear the tests Dr. Walshe has applied are much too sweeping and exclusive to be of any practical value towards its solution. For instance, a well-known linguist of my acquaintance went for a three weeks' holiday into Wales, without knowing a word of the vernacular, and with no aid towards its acquirement but a pocket dictionary. Yet, by a method of his own and by constant intercourse with the peasantry, he learned the language in the above time—i.e., he was able to converse in it, to read and write it correctly, and knew its formation and grammar. Whether he could understand a Gaiety burlesque in the Welsh tongue I had not thought of asking him.

I know I must not trespass upon your space, but I should just like to submit the following points for Dr. Walshe's consideration. What does he say to the number of our Indian officials who converse and correspond in Hindi, Persian, Pashtú, and other Eastern languages? What to the humble missionaries who translate our Scriptures into such difficult languages as Lithuanian, Finnish, Aramaic, and Coptic, to say nothing of the Kaffre click? A friend of mine, a German cavalry officer, himself a native of Westphalia, has told me he was stationed on one occasion with his regiment at Munich, and that it took him six months to become acquainted with the lingo of his Bavarian servant; yet surely the former must be said to have known German.

On the whole, it seems to me that what marks linguistic power in individuals is an initial faculty of learning language, rather than the degree of actual attainment in any particular form of speech, and the Mezzofanti type is by no means so doubtful as Dr. Walshe appears to think.

I am, Sir, yours truly,

Sussex-gardens, May 12th, 1885. T. FITZPATRICK.

SMALL-POX RISKS.

To the Editor of THE LANCET.

Sir,—I was gratified to find that you call attention to the serious risks run by the unrevaccinated in London during the present widespread epidemic of small-pox, and that you instance the well-known immunity of the servants and nurses of the Highgate Small-pox and Vaccination Hospital, and I was further gratified to find your excellent article widely quoted in the daily papers. After all, it is the general mass of the public who are likely to be led away by the specious tales and one-sided reasoning of the anti-vaccinationists, whom we want to reach. I confess that I think the extraordinary efficacy of the protection from small-pox afforded to our nurses and other employées is largely due to the fact that the lymph which the surgeon makes use of at this hospital he has himself taken from a subject he has operated upon, and of the efficacy of which he is consequently well assured; and, moreover, it is used as nearly as possible from arm to arm. I regret that at the other large institutions of the kind in the metropolis those conditions which appear to me to be essential for the absolute security of those confided to their charge are absent, and that the medical officers at such hospitals are compelled to make use of lymph of the quality of which they cannot themselves be absolutely certain. I cannot conclude also without expressing my regret that at the present day, notwithstanding the amount of evidence we have on the subject, a medical man of the standing of Surgeon-Major Pringle should, as in his recent lecture before the Society for the Encouragement of Arts, &c., publicly state his disbelief in the necessity for revaccination in adults who have been efficiently vaccinated. Such a statement is, I think, eminently calculated to encourage the present apathy of the general public as regards revaccination, and is certainly not warranted by the statistics of his professional brethren, at all events in Europe.—I remain, Sir, yours faithfully,

HERBERT GOUDE, F.R.C.S. Edin.

Small-pox and Vaccination Hospital, Highgate-hill, N., May 9th, 1885.

LIVERPOOL.

(From our own Correspondent.)

HOSPITAL SATURDAY IN LIVERPOOL.

SATURDAY, April 25th, was observed here as Hospital Saturday, boxes being distributed among all places where large bodies of working men are employed, and cages being attached to the street lamps at reasonable intervals. The result will be watched with keen interest this year, extraordinary pains having been taken to ensure the increased success of this mode of obtaining the working men's support to the hospitals, which are such a benefit to them. The amount collected in former years, averaging between £2000 and £2500, has been justly regarded as considerably less

than what might be expected in so large a district, containing such an enormous number of working men. Up till the 9th inst. the sum of £2357 had been received; more is expected to come in. To enhance the success of the movement this year, and to assist the general committee, a committee of working men was appointed last year, and at a meeting of the former, on the 7th inst., the following resolution was carried unanimously: "That this committee hereby offer their thanks to the working men's committee for their valuable assistance in increasing the amount of the Hospital Saturday contribution, and express the hope that their services will be continued."

THE SCHOOL OF MEDICINE.

The summer session commenced on the 4th inst. Considerable alterations have been made in the anatomical department of the building, by which further accommodation will be afforded, and an increased number of students will be enabled to dissect conveniently to themselves and to each other. On the 11th inst. there were nine subjects in the dissecting-room, on which between thirty and forty students were practising dissection. Mr. Frank T. Paul, formerly surgical tutor, now lectures on Medical Jurisprudence and Toxicology. At the recent examination ten students from this school passed in Anatomy and nine in Physiology, only one being rejected in both subjects.

THE LIVERPOOL UNIVERSITY COLLEGE.

At the last meeting of the Council of University College, a gift of £1500 was announced as having been received from Mrs. Sheridan Muspratt, widow of the late eminent Professor of Chemistry. This sum is to be applied for the endowment of a scholarship or scholarships in furtherance of the study of chemistry, and in commemoration of her late husband.

THE SPRING ASSIZES.

At the recent assizes the calendar was unusually light, there being no charge of murder and comparatively few cases of violence. What is still more remarkable, there was not a single charge of rape or criminal assault on females, although these assizes comprise the whole of South-west Lancashire with a number of small county towns, where such crimes have been lamentably frequent of late. It is therefore probable that the very severe sentences passed for those offences by Mr. Justice Day, who at the last three assizes presided in the Crown Court, have had their effect.

THE LATE MR. FREDERICK PHILIP PHELPS, SURGEON, OF EXETER.

The tidings of this gentleman's death under the melancholy circumstances noticed in last week's LANCET will be received with sincere regret by many local readers, who will remember the deceased when he was house-surgeon at the Northern Hospital more than twenty years ago. He was extremely popular with all who knew him, from his unvarying kindness to all with whom he had to deal, whether colleagues, subordinates, or patients, as well as his genial humour and constant cheerfulness.

BIRMINGHAM.

(From our own Correspondent.)

LAUDANUM IN WHOOPING-COUGH.

IT seems to be a Utopian idea that in the care for sick children among the poorer classes intelligence and prudence in the use of patent drugs will ever be the rule and not the exception. An inquest was held a few days ago on the body of a child ten and a half years old, who had suffered from whooping-cough. The mother, on the advice of a neighbour, purchased a pennyworth of laudanum, mixed it with vinegar and treacle, and gave it to the child a teaspoonful at a time. The quantities of the two latter ingredients are not mentioned, but the result showed that they could not have been large, for the child died after the second dose. The mother stated that she informed the chemist that she intended to give the compound to the child as physic, but no restrictions are placed upon the sale of powerful drugs with such an intention. The verdict of death from misadventure carries but poor comfort with it, and will probably not go far in teaching this class that the use of opium for young children, even in small quantities, is highly dangerous and improper in unskilled hands.

DAMAGES FOR THE BITE OF A DOG.

It is interesting to note a judgment given in the county court for damages in a case of this kind. The plaintiff, a working man, claimed £100, and was awarded £36, for the loss of time and injury caused to his leg. Fortunately for the patient he was able to prove that the dog was a ferocious one, and accustomed to bite mankind, and the law which allows compensation only under these circumstance enabled him to make his claim good. It is well that those who keep vicious dogs with a known propensity to bite people should be aware of the pecuniary risk attending such an indulgence.

TEMPERANCE ADVOCACY.

At a recent conversazione of the Ladies' Central Temperance Association a distinguished physician was selected to hold forth in support of the cause so strongly espoused by the Association, and to denounce the use of intoxicating beverages. To the consternation of the audience, however, though brought to curse, he remained to bless, and in forcible language he dwelt upon the intemperate temperance of some abstainers. In glowing terms he upheld the good which in occasional circumstances moderate drinking is capable of effecting, and pointed out the value of the judicious use of alcohol. His position, which he described as logically and scientifically sound, somewhat startled his audience; and if it did no more, must have aroused them to think how far they were right in not clearly ascertaining his views before they sent a deputation to ask his countenance and support at such a meeting.

Birmingham, May 13th, 1885.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE MEDICAL COLLEGE AND THE CORPORATION.

THE premises at present occupied by the College of Medicine are likely to be taken over for railway extension, and an application has been made to purchase, I understand at a cost of £10,000, an eligible site in one of our principal thoroughfares. The Corporation is the trustee of the site, and it so happens that it is part of an ancient charity left for the benefit of the poor of the city. I believe it is the contention of the medical authorities that the grant of the site would be a great benefit to medical education and an advantage to the city from the number of resident students attending, and so be an indirect advantage to the poor as in some way adding to the trade of the city and paving the way for its becoming some day the seat of the University of Newcastle. This view was advanced with great ability and eloquence by Dr. Heath, who headed a deputation from the College to the Corporation the other day. The granting of the site on the terms proposed by the College is held by some members of the Corporation at least as being beyond the powers of their trust, seeing that the College only offers £10,000 for a site worth, at least, three times as much, and that in this matter the College is to be treated as any other purchaser making an offer for the land. But on the other hand, Dr. Heath pointed out that "the proprietors of the College building could a few years ago have sold the building with profit and divided the proceeds among themselves, but that they scorned to do anything of the kind; they held it for public use and for the benefit of medical education." The question has been now well and forcibly put before the Corporation, and it is to be hoped it may be decided solely on its merits.

NEWCASTLE NATURAL HISTORY MUSEUM.

All visitors to Newcastle should visit the museum of the Natural History Society, which, it will be remembered, was opened by the Prince of Wales on his late visit to our city. The museum is now in very complete condition so far as a museum can ever be considered so, in view of the many additions a good one must from time to time receive. Only just lately Miss Mary Hancock presented the complete set of the original drawings of the British Nudibranchiate Mollusca, the work of her late brother, Mr. Albany Hancock. These drawings were made by him to illustrate a large work published by the Ray Society. By the perfectly natural and clear manner in which details are shown, this work sheds much light on a group of creatures till then comparatively unknown even to naturalists themselves. For another work,

illustrated by beautifully and delicately elaborated drawings which Mr. Albany Hancock had undertaken at the urgent request of several scientific friends in London, he received the gold medal of the Royal Society for 1858. This presentation was the first ever made to a native of Newcastle. The Bewick collection and the Hancock drawings are now on the walls of our museum, and well worthy of a visit from all interested in nature and art.

VACANT HOSPITAL APPOINTMENTS IN NEWCASTLE.

There is now an unusual number of hospital appointments vacant in Newcastle. As well as the vacancy at the Chest Hospital, mentioned last week, an honorary physician and surgeon is wanted at the Children's Hospital. Dr. J. G. Houseman and Dr. Coley are candidates for the physician's post and Dr. Aitchison and Mr. W. Glaholm Black for the surgeoncy. At the infirmary Dr. Limont is, so far as I have heard, the only candidate for the vacant physicianship. Dr. Limont has been acting as senior resident medical officer to the house for more than three years. For some time he has devoted himself specially to physician's work; and he asks the committee to release him from the post to enable him to compete for the higher appointment.

Newcastle-on-Tyne, May 11th.

EDINBURGH.

(From our own Correspondent.)

A LIME-LIGHT FOR DEMONSTRATION PURPOSES.

At the fortnightly meeting of the Edinburgh Medico-Chirurgical Society, Dr. Foulis gave a demonstration of the circulation in the web of a frog's foot and of some botanical test objects by means of the oxyhydrogen light. The light, transmitted through a powerful condenser, passed through an ordinary microscope lens, and was thrown upon a large plate of ground glass at a distance of about 25 ft. The image of the object demonstrated could be focused on this plate with great exactitude, the definition even with high powers being excellent, and the general effect strikingly satisfactory.

A RARE FORM OF ICHTHYOSIS.

Dr. Allan Jamieson exhibited a drawing from a case of ichthyosis palmaris et plantaris. The palms and soles of the patient were covered with a horny growth a quarter of an inch thick, which gave a loud resonant note when struck. All other parts of the skin were absolutely normal, and the only other morbid symptom was the very rapid growth of the nails both of the fingers and toes. In Dr. Jamieson's experience a case of ichthyosis with such exact delimitation of the areas affected was absolutely unique.

SUBPERIOSTEAL SURGERY.

Dr. C. W. MacGillivray exhibited portions of bone removed subperiosteally from the lower end of the humerus in a case of compound fracture and dislocation. The whole of the bone removed was replaced by a new formation, and the result of the operation was a movable and useful joint.

LARYNGEAL PARALYSES.

Dr. McBride read a paper on the above subject, dealing specially with bilateral paralyses, and illustrated by the records of several interesting cases. An observation of some importance was the detection of paralysis of both laterales in a case of locomotor ataxia, in which all the usual symptoms were well marked. He specially insisted on the value of laryngeal examination as an important adjunct to the diagnosis of various morbid conditions.

THE SCIENCE AND ART MUSEUM.

An extensive addition has just been commenced which will complete the Museum buildings as originally designed. For some time there has been overcrowding of specimens in several of the departments, rendering increased accommodation very desirable; and the crying need for a properly fitted library, where the public can avail themselves of the valuable collection of books possessed by the Museum, will at length be satisfied. Colonel Murdoch Smith has been appointed Director, a post left vacant by the sudden death of the late Professor Archer. Colonel Smith has a considerable reputation as an antiquarian, and has enriched both the British and South Kensington Museums by valuable collections made in the East. These public services have received their due recognition in the important post to which he has been appointed; and there is every reason to expect that he will prove no unworthy occupant of the place once filled by such men even as the genial and versatile Dr. George Wilson.

Edinburgh, May 11th.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS.

At the last meeting of the Council, a letter was received from Mr. O'Reilly-Dease offering a portrait of Mr. Butcher, the eminent Dublin surgeon, and also proposing to build a hall for the reception of Mr. Butcher's museum, in the event of that gentleman giving it to the College. Dr. Cameron vice-president of the College, stated that he was authorised by Mr. Butcher to offer his museum, and that Mr. Wheeler, to whom Mr. Butcher had promised to bequeath it, had kindly waived his claim. On the motion of Mr. Colles, seconded by Sir George Porter, the thanks of the Council were voted to each of the gentlemen concerned. The annual election of examiners, which had been arranged to take place on the 19th inst., has, in view of the expected new charter, been postponed to the 27th. It is confidently expected that several changes will occur, and some new blood be infused into that body. Among the various candidates who will come forward will be Mr. Swanzy to examine in ophthalmic surgery, Dr. Mapother in physiology, and Dr. Robinson in anatomy.

DEATH OF MR. JOHN NEILL, RESIDENT SURGEON, STEEVENS' HOSPITAL.

It is with deep regret I record the death of this promising young surgeon, at the early age of twenty-five, from blood poisoning. He died rather suddenly, and it is a doubtful point whether the cut which he received on making a post-mortem examination and which caused the blood poisoning was complicated with scarlatina or not. Mr. Neill was a private teacher of considerable repute, and was connected with the Ledwich School of Medicine as a demonstrator of anatomy, where he was much liked and where his loss will be greatly felt. Thoroughly straightforward in all his actions, kind in disposition, and unassuming in manner, he made friends everywhere, and his sudden and untimely decease is widely regretted. Mr. Neill's funeral took place on Tuesday last and was largely attended, a notable feature being the presence of about one hundred students, who walked in procession from Steevens' Hospital to the place of interment. It is contemplated by the students to present an address of condolence to Mr. Neill's father on his sad bereavement.

Dr. H. B. Fleming has been unanimously elected medical officer to the Omagh workhouse, in the room of his father, Dr. H. Fleming, resigned.

At a meeting of the Royal Cork Yacht Club, last week, Dr. Tanner was removed from the list of members on account of his action on the occasion of the Royal visit.

Small-pox is reported to have broken out at Enniskillen.

Dublin, May 12th.

ROYAL COLLEGE OF SURGEONS.

At an ordinary meeting of the Council of the College, held on Thursday, May 14th, the usual resolutions were passed fixing the date (July 4th) for the election of members of Council, in place of Messrs. Erichsen, Holmes, and Savory, who retire. It is probable that the two former will not seek re-election.

The report of the Committee in reference to the required certificate of instruction and proficiency in the practice of vaccination was received as follows:—"The Committee recommend to the Council that the existing regulation on the subject of the recognition of certificates in vaccination should remain in force, not only on account of the obligations of the College to the Local Government Board in England and the agreement with the Royal College of Physicians under the Scheme for the Examining Board in England, but because by recognising other certificates the

value of the diploma would be depreciated to future Members of this College. The Committee have, at the same time, further to report that they have reason to believe that if a representation were made by the Council of Queen's College, Belfast, to the Irish Local Government Board suggesting that that Board should invite the English Local Government Board to confer with a view to the establishment of educating vaccination stations in Ireland, subject to terms to be agreed upon by both Boards, the difficulty under which Irish candidates for the diploma of this College now labour might be surmounted."

The following recommendations of the Committee of Management were approved:—"1. That every member of the University of Edinburgh who shall have passed such an examination or examinations at his university as shall comprise the subjects of the First and Second Examinations of the Examining Board in England, and who shall have completed not less than four years of medical study according to the regulations required by his university, be eligible for admission to the Third or Final Examination of the Board, two years after his having passed all the other required examinations; that every candidate so admitted to examination be required to pay a fee of five guineas; and that every such candidate who shall have passed such Third or Final Examination shall, on the further payment of not less than twenty-five guineas, and subject to the bye-laws of each College, be entitled to receive the licence of the Royal College of Physicians of London and the diploma of Member of the Royal College of Surgeons of England. 2. That the regulation exempting candidates, members of universities, from any part of the examinations of the Examining Board in England do continue in force so long only as the examinations of the universities shall be satisfactory to the Committee of Management. 3. That the regulation applicable to the conditions of the admission of members of the English universities to the Third or Final Examination of the Examining Board in England be extended to such of the Scotch and Irish universities as require that not less than two of the four years' curriculum of professional education shall have been spent in residence at the university."

The President and Vice-Presidents' report on Sir James Paget's resolution, that a marble bust by Mr. Brock, A.R.A., of Sir Erasmus Wilson be placed in the College, was adopted.

The following motion, of which he gave notice at the last meeting, was moved by Mr. DURHAM, seconded by Mr. SAVORY, and carried unanimously:—"That seven delegates from this College be appointed with authority to invite an equal number of delegates from the Royal College of Physicians to meet and confer upon what steps, if any, can be taken to enable the two Colleges to obtain the legal right of giving the title of 'Doctor' to persons who shall have obtained the licence of the Royal College of Physicians of London and the diploma of the Royal College of Surgeons of England."

The delegates appointed were: the President, the Vice-Presiderts, Sir Joseph Lister, and Messrs. Marshall, Hulke, and Durham.

MEDICAL NOTES IN PARLIAMENT.

The Case of Mr. Hillman.

IN the House of Commons on the 7th inst., in reply to Mr. W. Corbet, who asked whether it was true that in the Court of Appeal the Lord Chief Justice of England decided in favour of Mr. Hillman, while two other judges held opposite views; and whether he would cause the law regarding the confinement of persons alleged to be insane to be so altered as to be intelligible to those who had to administer it,—Sir W. Harcourt stated that the Court of Appeal seemed to have decided that the detention of Mr. Hillman was lawful, and he could not admit that he was unlawfully placed in the asylum. He had no doubt the attention of the Lord Chancellor would be called to this matter in connexion with the Bill now under consideration.

Inoculation for Cholera.

On the 8th inst., in reply to Dr. Cameron respecting the discovery reported to have been made by Dr. Jaime Ferran of Valencia, in connexion with inoculation for cholera, Lord E. Fitzmaurice stated that Her Majesty's Minister at Madrid would be instructed to send home translations of any papers of Dr. Ferran's, and reports of the Madrid Academy of Medicine on the subject.

The Royal University (Ireland).

On the 11th inst., in reply to Mr. Kenny, Mr. Campbell-Bannerman stated that a power was granted to the Senate of the Royal University in their original charter, but lasting for three years only, with a view to facilitating the obtaining of degrees by medical men qualified before the passing of the Royal University Act. It expired in November last, and the Senate have not sought to have it renewed. There was an obvious reason for giving it in the first instance, which does not now hold good, and he was not aware of any intention to revive it.

Mortality from Small-pox.

On the 12th inst., in reply to Mr. Hopwood, Mr. G. Russell stated that two tables as to the mortality from small-pox, which were compiled respectively by Dr. Greenhow and Dr. Farr, could be found in the Appendix to the Report of the Select Committee in 1871 on the Vaccination Acts. According to these tables, the small-pox death-rate in London was 3044 per 1,000,000 in 1746-55; and 5020 per 1,000,000 in 1771-80. In 1871-80 the mortality, according to the returns of the Registrar-General, was 460 per 1,000,000.

Medical Relief and the Franchise.

On the report of the English Registration Bill, Mr. Davey moved the addition of a clause providing that the receipt of parochial medical relief should not disqualify a voter. The clause was opposed by the Attorney-General; but after some considerable discussion was carried by 87 to 50.

The Hospital on Quarantine Island.

On the 14th inst., Lord Hartington, in answer to Lord E. Cecil, who inquired whether he would ascertain if it was true that the Auxiliary Hospital on Quarantine Island, at Sawakin, stood on an old burial-ground, and that great sickness prevailed there just now in consequence of the unhealthiness of the situation, said that there was a hospital which had been selected by the authorities on the spot. When it was first suggested, he had doubts as to the salubrity of an island that had been a burial-ground. A telegram was sent to Sawakin, and in reply he was informed that the island was most healthy. For six years past scarcely a burial had taken place, and there was no reason to believe it would be unhealthy.

Vaccination.

Mr. G. Russell, replying to Mr. Hopwood, who asked whether the President of the Local Government Board was aware that by a house-to-house visitation of 15,000 houses in West Ham, instituted by Dr. Kennedy, it had been ascertained that the inhabitants are vaccinated in number up to the average of 98 per cent., said the figures in the question were inaccurate. Some complaint had been made of the system of sewers and drains in West Ham, and he had directed an inspector to make inquiries on the spot.

Overwork at School.

Mr. Mundella, in answer to General Feilden as to whether it was true that a young girl had committed suicide on account of overwork at school at Adlington, said inquiry had been made, and it was found that she was the daughter of a dairyman and worked in a cotton mill. As she was under thirteen, she attended school half-time, was in a low standard, and had no home lessons. She had a deal of farm work to do in carrying out milk. Her companions said she had complained of harsh treatment on the part of the woman who employed her at the factory, and that was the cause of her suicide. The school was well conducted, and no blame attached to the teacher in this case. Mr. Mundella added that more labour was exacted from children of tender years in England than in any other country in Europe.

The Sanitary Conference at Rome.

Lord E. Fitzmaurice, in reply to Mr. Sutherland, said Her Majesty's Government have accepted an invitation to a scientific and sanitary conference which is about to meet at Rome, and will examine the best methods of preventing the spread of cholera. Sir Guyer Hunter, who was employed in Egypt during the epidemic of 1883, and whose valuable reports have been laid before Parliament, and Dr. Thorne, the Assistant Medical Officer of the Local Government Board, will be the British delegates. The recommendations of the Conference will be in the usual course submitted to the

Governments represented, but will not have any binding force until they have been adopted by those Governments. It would be contrary to practice to make public at present the instructions given to the British delegates.

Obituary.

DR. DIOMEDE PANTALEONI.

THIS distinguished physician and patriot, whose death on the 3rd inst. we announced last week, was born seventy-seven years ago at Macerata, an ancient university town in the Marches. There he prosecuted his studies, preparatory and professional, and there he took his degree. Like many public-spirited Italians of that day, he was swept into the vortex of the revolution, and his time was pretty evenly divided between medical practice and politics. From 1848 to 1860 the States of the Church were in periodical upheaval, and shortly after the former of these dates Dr. Pantaleoni, who had settled in Rome, and had rapidly risen in public esteem as an able and accomplished physician, had from pontifical persecution to expatriate himself. This part of his career is dramatically described in his countryman Ruffini's "Doctor Antonio," of which fascinating tale he is known to be the hero. "He enjoyed," says the leading Italian journal, the *Opinione*, "the confidence of Count Cavour, and of that great minister's chief coadjutors in the work of national unity, while the historian will one day record the many onerous political missions carried out with sagacity and courage by the practitioner from the Marches—missions fraught with the best results for the complete liberation of Italy, and for her harmonious unification under the house of Savoy." In 1851 he was in London, the intimate friend of many leaders of the profession, and assisting in a silent and successful way the movement for that consummation which all true Italian patriots had at heart. Massimo D'Azeglio, the then Prime Minister of the Sardinian Government, had thus recommended him to his nephew, Emanuele D'Azeglio, the representative of King Victor Emanuel at the British Court:—"Pantaleoni is my familiar. He is the leading consultant physician to the foreigners in Rome; he is my right-hand man in all my chief transactions; no believer in the Republic, the promoters of which wanted to stiletto him; a Monarchist of lofty character and equal intelligence; an excellent person in all respects, and devoted to our views. Get him to speak on Italy, and you will find his talk worth volumes." Scarcely had the country organised itself constitutionally, when his native Macerata chose him as her representative in the national Parliament, and Cavour employed him in an important series of overtures to bring about, through Cardinal Santucci, a *modus vivendi* with the Papal Court. In 1873 he resigned his seat in the Chamber of Deputies, and by the royal decree of Nov. 6th of that year he was made a Senator of the Kingdom, in which capacity he did splendid service, particularly on all questions of academic education and of sanitary reform. All this time he was in extensive practice, not only among his fellow countrymen, but also among the foreign visitors who annually resort to Rome, many of whom are alive to attest his painstaking and successful treatment. To the Accademia Medica di Roma and the Royal Institution of the "Lincei" he contributed numerous important papers, the more practical of which are, we believe, about to be collected and to assume an independent and enduring form. On all questions of the climate of Rome, her water-supply, and the rules to be observed by the stranger within her gates, he was an acknowledged master; while no properly accredited professional brother, whatever his nationality, ever sought his advice in vain.

Among the works with which he employed the spare hours of his busy days and nights may be mentioned the "Storia Civile e Costituzionale di Roma dai suoi Primordi sino agli Antonini" (Civil and Constitutional History of Rome from its first beginnings to the Antonines), and "L'Ultimo Tentativo del Cavour per la Liberazione di Roma nel 1861" (The last attempt of Cavour for the Liberation of Rome in 1861). From these, especially the former, may be gathered some notion of his wide and deep knowledge and his vigorous thinking, while their style has all the characteristics of the independent investigator schooled in scientific and classical study.

His funeral, which took place on Tuesday, the 5th inst., was a public one. His native town of Macerata having signified its wish to possess his remains, these were accompanied from his house in the Via Ripetta to the railway station, the *cortège* being thus composed:—A company of the Municipal Guards, followed by a military band performing a dead march, and by a battalion of the 79th Infantry. Next came the hearse, covered with magnificent wreaths, contributed by the Town Council and by the chief learned societies; and this, again, was followed by a numerous train of senators, members of the legislative body, the leading physicians and surgeons of the city and province of Rome, representatives of all the scientific associations, and many personal friends in carriages or on foot. The cordons of the hearse, which was surrounded by the ushers of the Senate House, were held by General Durando, the President, and the Marquis Caracciolo Di Bella, the Vice-President, of the Upper Chamber; by Signor Tartufari, Councillor of the Court of Cassation and representative in Parliament of the constituency of Macerata; the Senator Count Cadorna, President of the Council of State; Dr. Bastianelli, Municipal Assessor; Professor Guido Baccelli, President of the Academy of Medicine; the distinguished Hellenist, Mariotti; and Signor Gravina, Prefect of Rome. The route along the Corso and Via Nazionale was lined by a dense and respectful crowd, and on the *cortège* reaching the station, the Commendatore Righetti, the most intimate friend of the deceased, pronounced a funeral oration of singular propriety and power. The coffin, having been consigned to the Ancona train, was received by the Municipality of Macerata, the scene of interment.

Medical News.

COLLEGE OF PHYSICIANS IN IRELAND.—At the May examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Elizabeth Bielby, Theodore D. Browne, Fitzwilliam Richard Augustus Evars, George Edw. Joseph Greene, Wilson Mills Nugent, Henry Stoker, M. Andrew Wade, Joseph Theophilus Weston.

MIDWIFERY.—Elizabeth Bielby, Theodore D. Browne, Thomas Joseph Dillon, Fitzwilliam Evars, George Edward Greene, Samuel Hornock, Henry Stoker, George Scott Tate, M. Andrew Wade, J. Theophilus Weston.

The undermentioned have been admitted Members:—

James Ellis. | Samuel Hamilton.

UNIVERSITY OF DUBLIN.—The following degrees have been recently conferred by the Senate of this University:—

BACHELOR IN SURGERY.—Orlando Palmer Beater, Andrew Grierson Fausselt.

BACHELOR IN MEDICINE.—Orlando Palmer Beater, Andrew Grierson, Fausselt.

DOCTOR IN MEDICINE.—Orlando Palmer Beater.

ROYAL UNIVERSITY OF IRELAND.—The undermentioned have passed the M.B. Examination of this University:—

Samuel Alexander, John Barron, James R. Burrows, Alexander Corry, *G. B. Crawford, M. H. Curtin, T. W. Dwyer, Robert English, G. H. Foott, R. E. Foott, R. M. Griffin, M. H. Hannigan, W. E. Hawkins, Daniel Hennessy, W. J. Loughrey, J. McAleer, Michael McCarthy, W. B. McWha, G. F. Marks, John Meenan, *J. Musgrave, James J. Nagle, John J. O'Brien, J. P. O'Byrne, R. Pettigrew, *E. L. Pooler, *John Ryan, J. Martin Savage, William Sexton, J. Henry Sharpe, Norman Smythe, *R. Thomson, *F. J. Tresilian, J. J. Walsh, M. J. Whitty, Samuel Wilson.

*Permitted to compete at the Honours Examination.

THE new workhouse infirmary at Croydon, erected at a great cost, is to be opened to-day (Saturday) by the Archbishop of Canterbury.

GLAMORGAN AND MONMOUTH INFIRMARY.—Miss Shand, who died recently in the Principality, has bequeathed £8000 to the trustees of the infirmary.

DANIEL MURRAY O'HARA, surgeon, sentenced to ten years' penal servitude for extortion, is reported to have strangled himself in Liverpool Gaol on the 7th inst.

AT the annual dinner of the Royal Hospital for Children and Women, which was held on the 13th inst., subscriptions amounting to more than £850 were received.

VACCINATION GRANTS.—Dr. Dugald Campbell, of Alfreton, Derbyshire (second time), Mr. Peter Swales, of Sheerness (seventh time), and Mr. T. Osborne-Walker, of Crick, Northamptonshire (second time), have received the Government grant for efficient vaccination.

PRESENTATION.—Miss Williams, who was for seven years matron at St. Mary's Hospital, has been presented by her friends at the institution with an illuminated address and a silver tea-service.

LONDON FEVER HOSPITAL.—The Lord Mayor has consented to preside at the second festival dinner in aid of the London Fever Hospital, which is to be held at Willis's Rooms on Tuesday, June 23rd.

UNIVERSITY COLLEGE, LONDON: FACULTY OF MEDICINE.—The distribution of prizes will take place on Wednesday, May 20th, at 4.30. The Right Hon. Lord Justice Fry, M.A., F.R.S., Vice-President of the College, will preside.

ANIMAL VACCINE.—It is stated that the authorities of Strasburg have published a regulation making the use of animal lymph for vaccination compulsory. Offices for its supply are to be inspected every ten days by the Government vaccinators.

THE annual general meeting of the Royal Medical Benevolent College will be held on the 21st inst., when the result of the polling for pensioners and foundation scholars will be announced. All balloting-papers are to be returned not later than the evening of the 18th inst.

AT a meeting of the Anthropological Institute on the 12th inst., the Earl of Northesk exhibited a collection of specimens of worked Jade from New Zealand. Mr. J. H. Kerry-Nicholls read a paper on the Origin, Physical Characteristics, and Manners and Customs of the Maori race.

THE MEATH HOSPITAL, DUBLIN.—The following gentlemen have been awarded prizes for the Winter Session 1884-5:—Senior Medical Prize: Henry Walter; Junior Medical Prize: John T. Russell. Senior Surgical Prize: R. D. Penefather, John T. Russell, and William J. Taylor, equal; Junior Surgical Prize: Alfred William Bewley, 1st, A. E. Mahood, 2nd.

A MEETING of graduates of the University of Aberdeen was held in Manchester on the 6th inst., for the purpose of welcoming Professor Ogston on his return from the Soudan. In his speech Dr. Ogston dwelt at some length on his Sawakin experiences, stating his high approval of the efficiency of the Army Medical Department and the care with which the wounded were treated.

THE Report of Colonel Haywood, engineer and surveyor to the Commissioners of Sewers, on the works executed by the Commission during 1884, has been issued. It states that the total length of sewers constructed during the year was 1163 feet, of which 1070 feet were upon the lines of old sewers. The Metropolitan Railway Company in connexion with their works between Cannon-street and Aldgate had to construct new sewers to the extent of about 7190 feet.

THE ZOOLOGICAL SOCIETY OF LONDON.—At the fifty-sixth anniversary meeting of this Society, which was recently held, Mr. William T. Blanford, F.R.S., Dr. A. C. L. G. Günther, F.R.S., Dr. Edward Hamilton, Mr. E. W. H. Holdsworth, and Surgeon-General L. C. Stewart were elected to the Council in place of the retiring members, and Professor W. H. Flower was re-elected president, Mr. Charles Drummond, treasurer, and Mr. Philip L. Sclater, M.A., Ph.D., F.R.S., secretary to the Society for the ensuing year.

UNIVERSITY OF CAMBRIDGE.—There will be an examination in certain branches of natural science for minor scholarships at Downing College on Tuesday, June 2nd next, and following days. Persons who have not entered at any college in the University are eligible to these scholarships, which will be of the value of from £40 to £70 per annum, and tenable until their holders are of standing to compete for a foundation scholarship. Further information will be given by Dr. Perkins or the Rev. J. C. Saunders, tutors of the College.

ROYAL NATIONAL LIFEBOAT INSTITUTION.—The Committee of this Society, which has now been established sixty-one years, in their annual report for 1884 state that during the year twenty-eight new lifeboats were despatched from the store-yard, a number greatly in excess of that sent out during any one year since 1866. The total number of boats now under the management of the committee is 284, which were instrumental in saving no fewer than 633 lives and 18 vessels between Jan. 1st and Dec. 31st, 1884. In the last sixty-one years as many as 31,355 lives have been saved through the instrumentality of the institution. Six silver medals and clasps, nine vote of thanks on vellum, and £5000 in money were granted by the committee for saving life in 1884. The total expenditure of the lifeboat service amounted to £52,724, while the receipts of the institution in subscriptions, donations, and dividends amounted to £44,810.

THE LATE PETER SQUIRE.—Friends of the late Peter Squire will be interested to know that the unveiling of a medallion portrait of him will take place at the Pharmaceutical Society's House, 17, Bloomsbury-square, on Wednesday, May 20th, at 4 P.M., by Sir Spencer Wells, Bart.

COMPULSORY NOTIFICATION AT DOVER.—A meeting, presided over by Sir Richard Dickeson, has been held at Dover, when deputations attended to represent the whole of the sanitary and Local Government Board districts in East Kent. The principal matter which occupied attention was the question of the public notification of infectious diseases. It was decided to forward a memorial to the Local Government Board, urging upon them the desirability of a legislative enactment for the compulsory notification of infectious diseases.

ROYAL HOSPITAL FOR INCURABLES.—The annual dinner in aid of the funds of this institution was held on the 7th inst., when it was stated that there are now 193 inmates and 476 out-pensioners, the qualification for admittance being not simply age or even poverty, but the pressure of incurable disease often combined with both. The expenditure amounts to over £21,000 per annum, and since 1881 it has been found necessary to sell out £15,000 of the funded stock. During the evening subscriptions and donations amounting to £4665 were announced.

UNIVERSITY COLLEGE HOSPITAL.—The festival dinner in aid of the funds of this institution was held on the 13th inst., the Prince of Wales presiding. During last year in-patients had been received to the number of 3152, as against 2849 in the previous year; while the out-patients were 33,743, as compared with 24,187 in 1883. The annual subscriptions to the hospital amount only to £2047, while the necessary annual expenditure is £19,500, and the only reliable income it receives from all sources is £6500. During the evening subscriptions amounting to over £5000 were announced by the secretary.

MIDLAND MEDICAL SOCIETY.—Mr. James Harmar, to whose long and most faithful services as honorary treasurer the success of the Midland Medical Society has been largely due, has recently resigned office. The members of the Society, under the presidency of Mr. T. H. Bartleet, have signalised their high appreciation of Mr. Harmar's services by presenting him with an illuminated address, a timepiece, and two silver candlesticks. The contributions overflowed, leaving a surplus, which, at Mr. Harmar's request, has been handed over by his successor, Mr. John Garner, as a donation to the Birmingham Benevolent Society.

GLASGOW ROYAL INFIRMARY SCHOOL OF MEDICINE, WINTER SESSION, 1884-85.—Prize and Honorary Certificate List:—Chemistry: Chemical Division—Prize, J. H. Miller. Medical Division—1st Prize, Robert C. Wakefield; 2nd Prize, W. J. France. Honorary Certificates: J. W. Lax, Thos. McCubbin, William McLeod, A. J. Harwood, J. J. Wilson, J. L. Wilson, Alex. McDonald, R. W. Roberts. Anatomy: Senior Division—Prize, Joseph Beadle. Honorary Certificates (in order of merit): J. Owen Jones, Gwllym Evans, J. R. Lloyd Jones, Frank A. Elkins, Edward Brooks. Junior Division—Prize, Robert C. Wakefield. Honorary Certificates (in order of merit): W. R. Walker, W. J. France, J. W. Lax. Practical Anatomy (in alphabetical order): Senior Division—Joseph Beadle, Edward Brooks, Gwllym Evans, Alfred J. Harwood, Hugh Owen Hughes, John Owen Jones, J. R. Lloyd Jones, Thomas C. Jones. Junior Division—W. J. France, John W. Lax, Alex. McDonald, Robert W. Roberts, Robert P. Williams. Physiology: 1st Prize, Robert C. Wakefield; 2nd Prize, John R. Lloyd Jones. Honorary Certificates: John Owen Jones, Frank A. Elkins, Randolph O. Willis. Surgery: Gold Medals, Foden Wilson, Robert H. Parry. Honorary Certificates: Fred. W. Ord, Alfred W. White, William Valentine. Medicine: Prize, Foden Wilson. Honorary Certificate, John Thomas. Materia Medica: 1st Prize, Robert H. Parry; 2nd Prize, Joseph S. Sergeant. Honorary Certificates: Thomas Jones, Edward Brooks, John Owen Jones.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BAILEY, T. RIDLEY, M.B.Ed., has been appointed Medical Officer of Health for Bilston, vice S. G. Gilbert, deceased.

BARNARD, ARTHUR TOYNSON, M.R.C.S., L.R.C.P., has been appointed Junior House-Surgeon to the Royal Albert Edward Infirmary, Wigan, Lancashire.

BARNARD, CHAS. E., M.D., has been appointed Health Officer for the Port of Hobart, Tasmania, Superintendent of Vaccinations, and Government Medical Officer, at a salary of £300 a year.

BARROW, FREDERICK, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Workhouse, Rothbury Union, vice Todd.

BRIGGS, HENRY, M.B., F.R.C.S.Eng., has been appointed Surgical Tutor at the Liverpool Royal Infirmary, vice F. T. Paul, F.R.C.S.Eng., resigned.

CAHILL, THOMAS, M.D., C.M.R.U.I., has been appointed Honorary Medical Officer to the Wellington Hospital, New Zealand.

HARRIS, DAVID, M.R.C.S., has been appointed Medical Officer for the First District of the Holborn Union.

HORAN, EDWARD, M.D., C.M.R.U.I., has been appointed Surgeon to the Charters Towers District Hospital, Queensland.

KEYWORTH, JOHN WHITE, M.D.Lond., M.R.C.S., has been appointed Surgeon Superintendent to the Napier Hospital, New Zealand.

MILLER, JOSEPH EWING, A.B., M.B., B.Ch., Trinity College, Dublin, has been appointed House-Surgeon to the Chester General Infirmary, vice Dr. A. Macpherson, resigned.

MORGAN, E. RICE, M.R.C.S., L.S.A.Lond., has been appointed Certifying Factory Surgeon for the Morriston District, vice Henry Davies, L.R.C.P.Lond., &c., deceased.

MORGAN, Mr. W., has been appointed Analyst for the Borough of Monmouth.

NASON, C. S. STEPHEN RICHARD, M.D., M.Ch.Dub., has been appointed Medical Officer for the Redmarley District of the Newent Union, vice Boughton.

RANDS, S. JOHN OUTLAN, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Bransford District of the Bosmere and Claydon Union, vice Elliston, resigned.

SALTER, FRANCIS JOSEPH, L.R.C.P., L.R.C.S.Ed., has been appointed House-Surgeon to the Devonshire Hospital, Buxton, vice A. M. Jackson, M.B., resigned.

SHEWEN, ALFRED, M.D.Lond., has been appointed Physician to the Prince Alfred Hospital, and Joint Lecturer on Clinical Medicine, at the University of Sydney.

SIMMONS, HAROLD, M.R.C.S., L.S.A.Lond., has been appointed Physician's Assistant to the Middlesex Hospital.

STOKES, JOHN FRED. JOSEPH, M.B., C.M., B.Sc.Ed., has been appointed Medical Officer of Health for the Parish of St. Pancras, vice Mr. Shirley Murphy, resigned.

SYMES, WM. HENRY, M.D., C.M.Ed., has been appointed Honorary Medical Officer to the Christchurch Hospital, New Zealand.

WILLIAMS, GEORGE HERBERT, M.R.C.S., L.R.C.P.Ed., late House-Surgeon to the Royal Infirmary, Manchester, has been appointed House-Surgeon to the North Lonsdale Hospital, Barrow-in-Furness, vice J. S. Moreton, M.R.C.S., resigned.

Births, Marriages, and Deaths.

BIRTHS.

COOPER.—On the 11th inst., at 9, Henrietta-street, Cavendish-square, the Lady Agnes Cooper, of a daughter.

HARDY.—On the 13th inst., at Southville-park Villas, Dulwich, the wife of H. Nelson Hardy, F.R.C.S.Ed., of a daughter.

HARINGTON.—On the 5th inst., at Sherborne Lodge, Cheltenham, the wife of H. N. V. Harington, L.R.C.P.Ed., I.M.D., of a son.

HUMPHREYS.—On the 9th inst., at St. Leonards-on-Sea, the wife of J. H. Humphreys, M.D.Lond., prematurely, of a son (stillborn).

RAKE.—On the 11th ult., at Mucurapo, the wife of Beaven Neave Rake, M.D.Lond., Government Medical Officer, Trinidad, of a son.

MARRIAGES.

EMMETT—DELLER.—On the 5th inst., at the Parish Church, Paignton, Richard Emmett, M.R.C.S., L.R.C.P.Lond., to Georgie V. Deller, of Woodville, Paignton, South Devon.

JACKSON—PRIESTLEY.—On the 4th inst., at St. Mary Abbot's, Kensington, by the Rev. H. Webb-Peploe, M.A., Herbert Francis Vaughan Jackson, M.R.C.S., L.R.C.P.Lond., son of the late Sidney Vaughan Jackson, Esq., of Ballina, Co. Mayo, to Amy, only daughter of the late Robert Priestley, Esq.

WATSON—O'DONNELL.—On the 22nd March, at Budaon, N.W.P., India, Surgeon J. Watson, M.D., Medical Staff, Lucknow, to Florence, fourth daughter of J. W. O'Donnell, Esq., C.E.

DEATHS.

EDWARDS.—On the 11th inst., Mary Edwards, wife of Henry Edwards, Surgeon, Lichfield, only daughter of the late Godfrey Hirst, of Langdon Hall, Solihull, aged 53.

FIELD.—On the 12th inst., at 31, Lower Seymour-street, Portman-square, Honor, the infant daughter of George and Pauline Field, aged 16 months.

PANTALEONI.—On the 3rd inst., at Rome, Il Commandatore D. Pantaleoni, M.D., Senator of the Kingdom of Italy.

N.B.—*A fee of 1s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

APPLETON & Co., New York.

Transactions of the New York State Medical Association for 1884. Vol. I. Edited by Austin Flint, jun., M.D. pp. 654.

BAILLIÈRE, TINDALL, & COX, London.

Manual of Chemistry. By W. Simon, Ph.D., M.D. pp. 411, with 16 Illustrations on Wood and 7 Coloured Plates.

BLAKISTON, SON, & Co., Philadelphia.

Surgical Delusions and Follies. By John B. Roberts, A.M., M.D. pp. 55.

CHURCHILL, J. & A., London.

A Treatise on Gout and Rheumatism and the Allied Affections. By Peter Hood, M.D. Third Edition, Revised and Enlarged, with a Chapter on Sleep. pp. 419.

Illustrations of Clinical Surgery. By Jonathan Hutchinson, F.R.S. Fascic. XVIII. 4s. 6d.

Clinical Lectures on Scrofulous Neck; by T. Clifford Allbutt, M.D. &c. And on the Surgery of Scrofulous Glands; by T. Pridgin Teale, M.B., F.R.C.S. pp. 32.

The Student's Guide to Medical Jurisprudence. By John Abercrombie, M.D. Cantab., M.R.C.P. pp. 367.

Lectures on Diseases and Injuries of the Bar. By W. B. Dalby, F.R.C.S., M.B. Cantab. Third Edition. pp. 200, with Illustrations.

Diagnosis and Surgical Treatment of Abdominal Tumours. By Sir Spencer Wells, Bart. pp. 216, with Illustrations.

HIGGINBOTHAM & Co., Madras.

Outlines of Medical Jurisprudence for Indian Criminal Courts. By J. D. B. Gribble, Madras Civil Service (retired). pp. 266.

HIRSCHWALD, A., Berlin.

Die Aetiologie der Chronischen Lungenschwindsucht vom Standpunkt der Klinischen Erfahrung. Von Dr. Herrmann Brehmer, sen. S. 517.

JOHNSTON, W. & A. K., Edinburgh.

Students' Atlas of Bones and Ligaments. By C. W. Cathcart, M.A., M.B., &c., and F. M. Caird, M.B., F.R.C.S.E. Thirty Plates, with descriptive Letter-press.

LEWIS, H. K., London.

On some Common Injuries to Limbs, their Treatment and After-treatment, including Bone-setting (so-called). By Edward Cotterell, M.R.C.S. &c. pp. 108, with Illustrations.

The Principles and Practice of Medicine. By Rustomjee Naserwanjee Khory, M.D. Brux. In 2 vols. Second Edition, Revised and much Enlarged. pp. 550-747.

LIPPINCOTT, Philadelphia.

Micro-Chemistry of Poisons, including their Physiological, Pathological, and Legal Relations. By T. G. Wormley, M.D., Ph.D., LL.D. Second Edition. pp. 784, with 96 Illustrations on Steel.

LONGMANS, GREEN, & Co., London.

Transactions of the Obstetrical Society of London. Vol. XXVI.

Works of Thomas Hill Green. Edited by R. L. Nettleship. Vol. I.: Philosophical Works. pp. 541.

An Introduction to Practical Organic Analysis. By G. E. R. Ellis. pp. 72.

MACMILLAN & Co., London.

A Text-book of Pharmacology, Therapeutics, and Materia Medica. By T. Lauder Brunton, M.D. &c. Adapted to the United States Pharmacopœia by F. H. Williams, M.D. Boston. pp. 1139, with Illustrations.

MACNIVEN & WALLACE, Edinburgh.

Health Lectures for the People. Fifth Series. pp. 185, Illustrated.

MORTON, J. P. & Co., Louisville, Kentucky.

Original Researches in Mineralogy and Chemistry. By J. Lawrance Smith. Edited by J. B. Marvin, B.S., M.D. Printed for Presentation only. pp. 630.

PENTLAND, YOUNG J., Edinburgh.

Text-book of General Botany. By Dr. W. J. Behrends. Translated from the Second German Edition. Revised by Patrick Geddes, F.R.S.E. pp. 374, with 408 Illustrations.

TINSLEY BROTHERS, London.

The Science of Change of Air. By D. S. Skinner, M.D. Brux. pp. 62.

The Colloquial Linguistic Faculty and its Physiological Groundwork; by W. H. Walshe, M.D. (Bale & Sons.)—Scottish Review, April.—The Osteology of Anica Calva; by R. W. Shufeldt.—British Gynæcological Journal, Part I. (Smith, Elder, & Co.)—Die Sterblichkeit der Stadt Budapest in den Jahren 1876-1881; von Josef Körösi.—The Position of the Medical Profession in regard to Certificates of Mental Unsoundness and Civil Incapacity; by T. S. Clouston, M.D.—Proposals for the Amendment of the Laws relating to Lunatics and Habitual Drunkards; by W. H. Kesteven, M.R.C.S.—Is Enteric Fever a Cattle Disease? by Jas. F. Allen, M.D. (Davis, Pietermaritzburg.)—Lunacy in many Lands: an Introduction to the Reports on the Lunatic Asylums of various Countries visited in 1882-85; by Dr. G. A. Tucker. (Presented to the Government of New South Wales.)—On Idiopathic Anæmia; by J. H. Musser, M.D., Philadelphia.—Douze Cas d'Opération de Trachéotorrhaphie; par le Dr. Villiet.—Simple Recipes for Sick-room Cookery; by Mrs. Buck, 2d.—Why not Eat Insects? by Vincent M. Holt. (Field & Tuer.)—Der Vegeterianismus; von Dr. G. Bunge.—Pneumonia in Young Children; by L. E. Holt, M.D.—Le Choléra; par le Dr. J. P. Bonnafont. (Baillière et Fils.)—The Action of Alcohol on the Human System; by H. Harper, M.D.—The Kronenquelle at Obersalsbrunn; by Dr. C. Laucher.—Village Sanitation; by H. J. Alford, M.D.

Medical Diary for the ensuing Week.

Monday, May 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

Tuesday, May 19.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Prof. Gamgee: Digestion and Nutrition.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Payne: Varicella Gangrenosa.—Mr. Pollard: A case of Pyæmia.—Dr. Hencage Gibbes: The Tubercle Bacillus in Animals.—Dr. Saundby: Atrophy of the Adrenals.—Dr. Seymour Taylor: A case of Addison's Disease.—Dr. Hadden: Atrophy of the Adrenals with Addison's Disease.—Dr. Wickham Legg: A case of Phosphorus Poisoning.—Dr. Thin: Sequel to a case of Rodent Ulcer previously reported.—Mr. Cullingworth: Impaction of a large Calculus in each Ureter.—Dr. Burnet: Primary Melanotic Sarcoma of the Liver (card).—Dr. Goodhart: (1) A case of Phosphorus Poisoning (card); (2) Specimen of Leprosy, for Dr. Beaven Rake of Trinidad (card).—Mr. Makins: Primary Sarcoma of the Tibia (card).—Dr. Sharkey: (1) Impaction of a Corn in the Œsophagus for Twenty Months (card); (2) Aneurysm of the Heart (card); (3) Multiple Epithelial Growths in the Œsophagus (card).—Mr. Poland: Sections of Epithelial Growths in Viscera after Epithelioma of the Tongue (card).—Dr. Chaffey: (1) Multiple Sarcoma in a Child (card); (2) Lympho-sarcoma of Bladder (card).—Mr. Hutchinson, jun.: Two cases of Epithelioma of the Hand (card).—Mr. Lane: (1) Bony Process from the Humerus (card); (2) Cases of Displacement of the Foot (card); (3) Fracture of Pelvis (card).—Mr. George Lawson: Extensive Secondary Glioma after Removal of both Eyes (card).—Dr. Barling: (1) Round-celled Sarcoma of Peroneus Longus (card); (2) Alveolar Sarcoma of Triceps (card).—Dr. Hale White: (1) Perforating Tubercular Ulceration of Intestine (card); (2) Grain of Corn causing Typhlitis and Intestinal Strangulation (card).—Dr. Turner: Aneurysm of Aorta communicating with Superior Vena Cava (card).—Mr. Shattock: Hernia into the Fossa Duodeno-jejunalis in a Child (card).—Dr. Hebb: Melanotic Sarcoma (card).—Dr. Dawtrey Drewitt: Persistent Branchial Fissure in a Child (living).

Wednesday, May 20.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

Thursday, May 21.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. C. Meymott Tidy: Poisons.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. H. E. Juler: On the Use of the Ophthalmoscope in the Practice of Medicine.—Dr. Champneys: Some Points in the Diagnosis of Cervical Stenosis.

Friday, May 22.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Report of the Spina Bifida Committee.—Mr. George Lawson: A case of Successful Œsophagotomy for the Removal of Plate with Artificial Teeth accidentally swallowed.—Dr. Colcott Fox: Two cases of Raynaud's Disease.—Mr. William Anderson: A case of Villous Tumour of the Bladder.—Mr. Bernard Pitts: A case of Tumour of the Bladder, removal, cure.—Mr. Jessett: A case of Plastic Operation for Epithelioma of Lower Lip (living specimen).
ROYAL INSTITUTION.—9 P.M. Mr. W. H. Pollock: Garrick.

Saturday, May 23.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Odling: Organic Septics and Antiseptics.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, May 14th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 8	29·95	W.	45	42	100	56	34	·12	Bright
,, 9	29·96	W.	50	45	100	59	40	·09	Bright
,, 10	29·95	W.	51	45	104	57	44	...	Cloudy
,, 11	30·11	N.	46	41	93	57	40	...	Cloudy
,, 12	30·19	N.E.	48	42	90	59	41	...	Hazy
,, 13	29·89	S.E.	50	44	94	59	40	...	Bright
,, 14	29·85	N.E.	49	44	94	55	40	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE LATE GENERAL GORDON ON MEDICAL MISSIONS.

IN the quarterly paper of the Edinburgh Medical Missionary Society, issued in May, is published a letter from the late General Gordon to the Rev. A. W. Schapira, Church Missionary Society missionary at Gaza, Palestine, in which he says that the fact of the inhabitants of cities like Gaza being fanatical is in a great measure due to their only knowing Europeans by repute, and expresses the opinion that by such establishments as hospitals a great moral effect is produced.

M.D.—We greatly prefer that clubs should pay 5s. or 6s. per member; but the sum named is not to be rejected.

CARDIAC MURMURS IN THORACIC ANEURYSMS.

To the Editor of THE LANCET.

SIR,—Will any of your readers enlighten me as to the following. A female patient was admitted into this infirmary some time ago for cardiac disease. On admission, she complained of pain over the apex of the heart, with great palpitation. On stethoscopic examination, a loud diastolic murmur was heard over the apex region (that being the point of maximum intensity), by myself and several medical men. A few days back she had severe hæmoptysis, and gradually sank. On making a post-mortem examination, the following was revealed: A true aneurysm of the commencement of the arch of the aorta; there was very slight atheroma of the internal surface of the tumour; the cardiac valves were intact, and the heart and lungs normal. Now arises the query, Why this pain, hæmoptysis, and murmur? Was it conveyed along the wall of the ventricle and so intensified at the apex? Or was it due to the patency of the semilunar valves, produced through the agency of the aneurysm? We have it from authorities on the subject that murmurs are the exception, and not the rule, in thoracic aneurysms.

Having seen an almost similar example some time ago, and failing to find any mention of such statements as the above in any books on the subject, is my excuse for occupying your space.—Yours faithfully,

City Infirmary, E., May 11th, 1885. W. GEM.

Medicus.—The question has been asked and answered more than once in our columns. (See THE LANCET, June 16th, 1883, p. 1076.)

FEES FOR LUNACY CERTIFICATES.

To the Editor of THE LANCET.

SIR,—A few months ago I was called upon to certify a lady of unsound mind whom I had attended for a mental affection some weeks before, and on sending my account for the certificate (£1 1s.) the other day was informed that on two previous occasions on which she had been certified her then medical attendants made no charge for the certificates, as they had been in previous attendance. Having never before heard such a fee disputed on this ground, I should be glad if some of your readers would kindly tell me the custom or rule in such cases.

I am, Sir, your obedient servant,

May 8th, 1885. LUX.

THE ACTION OF IRON ON THE SYSTEM.

G. BUNGE, in the *Zeit. Physiol. Chem.*, describes experiments on the form in which iron exists in egg yelk. He is led to believe that food does not contain iron in inorganic combinations, but that it only exists in complex organic compounds which have been formed by the vital processes. It is absorbed and assimilated in this form, and then converted into hæmoglobin. This is, he is aware, apparently at variance with the observations of practical physicians. The apparent contradiction may, he thinks, be explained by the hypothesis that inorganic iron salts prevent the decomposition of the organic iron compounds in the intestinal canal.

Lex.—The legitimacy might be questioned, but its possibility could not be denied.

WE are unable to find room for *Dr. Gibbons'* letter in our present number.

MEDICAL MISSIONS AS FIRST AIDS TO CHRISTIANITY AMONGST THE HEATHEN.

To the Editor of THE LANCET.

SIR,—The annotation upon "Medical Missions" in your issue of Feb. 14th last stimulates me to give you an independent account of my personal observations of this kind of work in operation amongst the heathen natives of South Africa.

So far as I have been able to discover during my travels in this part of the world, and so far as medical mission work goes, there appear to be three classes of mission stations in South Africa:—1. Those which do not dabble with medicine. 2. Those which do dabble with medicine to an amusing degree. 3. Those which either have a resident medical officer or are within reach of medical aid. The missionaries I have spoken to in charge of stations coming under Class 1 give me as their reason for not prescribing for sick natives that they know nothing about medicine or drugs beyond castor-oil or Epsom salts. Those in charge of stations coming under Class 2 have informed me that they feel perfect confidence in their ability to undertake any medical or surgical case. At these stations I have seen well-stocked surgeries and surgical instruments, from vaginal speculums to midwifery forceps and tooth instruments. Those stations to which a medical officer is attached are very few and far between—in these parts at least; I am only personally acquainted with one; but his (the doctor's) presence is not felt by the surrounding natives, his duties being limited to teaching in the Young Men's College, and in professionally attending the staff of the particular mission connected with his sect or denomination. By paying, natives and Europeans can, however, see the doctor. Not many miles from this station there is another large mission station, with a free dispensary attached; but a lady has charge of the drug department and prescribes for the sick and the lame. But in not a single instance did I meet with, or hear of, a medical mission station, working as such, in connexion with or independently of any of the numerous mission stations scattered about in the interior or lower parts of Africa. In all directions all I could hear was that there were no funds for developing "medical mission" work. For nearly four years I had medical charge of a Government (colonial) dispensary and hospital, at which more than 3500 sick were relieved annually (*vide* Blue Books, 1882-83-84). There was another medical establishment similar to the one under my own charge in the same territory; both were working an enormous amount of good, and both were closed upon the plea that there were no more funds left to carry on either the one or the other. During the existence of these dispensaries and hospitals, it was a rare thing to hear of witchcraft, "smelling-out," or other barbarous proceedings connected with disease or the sick and suffering; but, strange to state, within a few months of their being closed the native doctors could be met with everywhere, witchcraft again came into practice, and "eating-up" and "smelling-out" (practices connected with witchcraft) rapidly developed, with all their cruelties. However, the field is still open and "cut and dried" for medical mission work. This field is without an equal in South Africa; its benefits have already been tasted, and many long for its re-establishment, and it is a mighty weapon to use against heathenism in experienced hands.

The subject is far too long to discuss in your columns, and I am unable to do so at this time; but should any of your readers feel interested in medical mission work, the little personal experience I possess shall be placed at their disposal. However, I am strongly of opinion that medical mission work should be conducted independently of any ordinary mission station.—I am, Sir, yours truly,

S. CARTWRIGHT REED, M.D., J.P.

Douglas, Herbert, South Africa, March 31st, 1885.

Student.—There is much more laxity as to medical qualifications in the United States than here; but there is a marked tendency to improvement. We cannot speak definitely as to the employment of unqualified assistants.

USE OF THE TRICYCLE.

To the Editor of THE LANCET.

SIR,—May I ask through your columns whether in the experience of those members of the profession who use the tricycle a woman who is pregnant may ride that machine without any untoward results, and up to what period of pregnancy she may continue to ride with safety? The machine used is the "Quadrant," in which the power is gained by a vertical treading action, so that the employment of the abdominal muscles is reduced to a minimum.—I am, Sir, yours faithfully,

May 12th, 1885. A MEMBER OF THE CYCLISTS' TOURING CLUB.

A COLUMBIAN OPINION ON INFANTILE CONVULSIONS.

DR. EVARISTO GARCIA mentions, in the *Revista Médica* of Bogotá, the case of an infant of a few days old with severe and persistent convulsions, both tonic and clonic, which he successfully treated with very frequent small doses of bromide of potassium combined with chloral, warm aromatic baths being administered three times a day. He says bromide and chloral are important and valuable drugs in the treatment of infantile diseases, children bearing relatively larger doses of chloral than adults without vomiting or inflammation of the intestinal mucous membrane; they are, too, more susceptible to the hypnotic effects of bromide of potassium, which produces a calm sleep without convulsions or congestions, which at such an age makes opium a difficult remedy to deal with. Although the bromide produces pruritus with a roseolous rash, it causes sleep and calms the patient.

Mr. G. E. Walker.—The paper is marked for insertion. The letter is, we fear, too lengthy for publication—at least at present.

Mr. Dutch.—We are not acquainted with the rules of the Association.

PERMANGANATE OF POTASH IN FUNCTIONAL AMENORRHŒA.

To the Editor of THE LANCET.

SIR,—Having read with much interest a leading article in your journal on the use of permanganate of potash in functional amenorrhœa, and several communications from gentlemen who had tried it, I determined to give the drug a trial on the first opportunity. It was not long before I had one, and with brilliant success.

Miss E. F——, aged seventeen, had menstruated regularly for two years; but about four months ago her catamenia suddenly stopped, owing probably to a moral emotion that she had at the time. Her general health was very satisfactory, and no signs of any organic disease or chlorosis were apparent; but during the periods at which menstruation would have taken place she suffered from headache, loss of appetite, nausea, heaviness in the lower extremities, and sometimes epistaxis. I ordered one grain of permanganate of potash to be taken three times daily in a little sugared water, with the usual hygienic precautions. After being under this treatment for a few days, menstruation reappeared at the proper time without any pain or other suffering.

Believe me, Sir, yours faithfully,

Malta, May 4th, 1885. F. BOSO, M.D.

W.M., M.B.—The improvement in hearing seems to have been due to climatic influences, rather than to any surgical interference. This influence appears to have been relied on by those who recommended in turn high latitudes, New Zealand, and a dry climate. In the lining membrane of the middle ear the local change which is present in good hearing on the one hand, and in imperfect hearing on the other, is of so light a character that a variation in climate is frequently sufficient to effect even sudden changes.

Mr. A. G. Lacy.—We can only refer our correspondent to our advertising columns.

TRICHLORACETIC ACID NOT A SOPORIFIC.

SOPORIFIC virtues have been ascribed to trichloracetic acid by various writers. L. Hermann shows, in Pflüger's *Archiv*, that it is destitute of any trace of this action, even when injected in large quantities. Its most characteristic action when injected in considerable quantity is the production of paralysis starting from the hinder extremities.

A Sheffield Medical Student.—We are inundated with such specimens as the one sent by our correspondent. The only remedy seems to be to make these *lâches* known to the bodies whose diplomas are held by the delinquents.

COCAINE IN HAY FEVER.

To the Editor of THE LANCET.

SIR,—May I, through your columns, ask some of those who are now familiar with the use of cocaine whether they consider it probable that the application of a weak solution to the conjunctiva and the mucous membrane of the nose would, by virtue of its remarkable anæsthetic properties, be likely to prove of benefit to sufferers from hay fever? Before many days the intolerable miseries of this complaint will be again upon us; and if there is a likelihood of this suggestion proving serviceable, it behoves us to give the drug a trial, with the hope of adding another to its numerous virtues. I have no experience in the use of this valuable aid to the oculist, &c., and therefore am unable to say what would be the porportions of a solution strong enough to be *of* service without causing discomfort by affecting the accommodation of the eye. I am afraid expense would be an obstacle, for, on inquiry, I find that the present price of a 4 per cent. solution of hydrochlorate of cocaine is 35*s.* an ounce.

I am, Sir, yours obediently,

Long Stretton, May 13th, 1885. C. A. OWENS.

TREATMENT OF EPILEPSY BY SIMULO.

To the Editor of THE LANCET.

SIR,—Would any of your readers who have had experience of the treatment of epilepsy by simulo, a plant of the hyssop family (mentioned in THE LANCET of April 18th, page 722), kindly give me the result, as I have a case in which all the ordinary remedies have failed, and am anxious to try it.

I am, Sir, yours faithfully,

May 4th 1885. M.R.C.S.ENG.

RELATIVE DIGESTIBILITY OF DIFFERENT KINDS OF FLESH.

MESSRS. R. H. CHITTENDEN and G. W. CUMMINS, in the *American Chemical Journal*, describe attempts to obtain positive results as to the relative digestibility of the more common edible species of fish, comparing it with that of various kinds of meat. Artificial gastric juice, made with pepsin and hydrochloric acid, was employed, and the following relative figures obtained:—The digestibility of beef, 100; veal, 95; mutton, 92; chicken (light meat), 87; ditto (dark meat), 84; salmon, 92; mackerel, 86; haddock, 82; trout, 78; lobster (young), 88; ditto (large female), 79; ditto (large male), 69; fresh cod, 72. Generally the white flesh is more digestible than the dark, and raw meat than cooked. In all the above experiments, however, the flesh was steam-cooked.

T. M.—Certainly the practice is a dangerous one. Why do so? It is not only good policy, but simply just, to keep close to the letter and spirit of the law. Let the relieving officer be left to perform his proper function. It is not for a medical officer to take the initiative in the matter. No certificate should be signed, except on a magistrate's order, in the class of cases referred to.

L.R.C.P., M.R.C.S., 1860, has not enclosed his card.

"MEDICAL PRACTICE IN THE UNITED STATES."

To the Editor of THE LANCET.

SIR,—In answer to the inquiry of "Medicus" in THE LANCET of April 11th, I take the liberty to say that the qualifications for practice in the United States are regulated by each State. In the Eastern, Middle, and Southern States a diploma from a legally authorised medical school is required, the same to be registered with the clerk of the court. In a few States ten years' practice previous to the passage of any special medical law qualifies. The East affords the best field for practice. Our professional men in law and medicine in search of new locations gravitate westward. In proportion to the population, they stand about one to two between the East and West.—I am, Sir, yours truly,

U. W. SNYDER, M.D.

Belmont, Pennsylvania, U.S.A., April 28th, 1885.

Sciatica.—Spencer Thomson's book, "Health Resorts of Britain," might assist our correspondent.

EXAMINATIONS IN THE VOLUNTEER SERVICE.

To the Editor of THE LANCET.

SIR,—Will some of our volunteer surgeons who have already passed their examination kindly assist me by saying which are the best books or book to read for the examination in the volunteer service?

I am, Sir, yours truly,

Hull, May 11th, 1885. A VOLUNTEER SURGEON.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Dyce Duckworth, London; Dr. Braxton Hicks, London; Mr. H. Goude, London; Mr. Rushton Parker, Birmingham; Mr. W. Rivington, London; Mr. G. Berdoe, London; Dr. Bristowe, London; Dr. Emil Emond, Mont Dore; Dr. Maglioni, Montevideo; Professor Longmore, Netley; Dr. Brailey, London; Dr. Cruise, Dublin; Mr. Wilkinson; Dr. Paul Boerner, Berlin; Dr. Ketchen, Middlesbrough; Mr. A. G. Lacy; Mr. A. J. Harvey; Dr. Aikman, Guernsey; Mr. Balmanno Squire, London; Dr. G. D. Mackintosh, Uppingham; Mr. Buckler, Biarritz; Mr. G. C. Macdonald, London; Dr. H. J. Alford; Mr. G. V. Perez, London; Mr. Carmalt Jones, London; Mr. T. C. McCulloch, Hanwell; Mr. Gem, London; Mr. C. J. Bond, Leicester; Brigade-Surgeon McCarthy, London; Dr. Borg, Malta; Dr. Snyder, Belmont, Pa.; Mr. Barwell, London; Mr. McGeli; Mrs. Higginbotham, Glasgow; Dr. Beaty, Indore; Mr. Comford, Cheltenham; Dr. Jay, Leamington; Mr. Laurie; Mr. Bates, New York; Mrs. Rawlins, Westgate-on-Sea; Dr. Cunningham, Pwllheli; Messrs. Evans and Co., London; Mr. Steadman, London; Messrs. Stevenson and Co., Bournemouth; Mr. Warrington, Wellington; Messrs. Allen and Hanburys, London; Mr. Grimsley, St. Asaph; Mr. Granger, Whitby; Mr. Flint, Westgate-on-Sea; Mr. Cornman, Bath; Lieutenant-General Radcliffe, Leamington; Mr. Rankine, Sunderland; Mrs. Bayly; Mr. Cuff, Scarborough; Mr. Gravatt, London; Mr. L. Dickinson, London; Dr. Fitzpatrick, London; Mr. Meadows, Hastings; Mr. G. B. Walker, Liverpool; Mr. H. Lee, London; Dr. Suckling, Birmingham; Dr. Berry, Keighley; Dr. Gordon Black, London; Mr. W. B. Owen, London; Mr. R. Jones, Liverpool; Mr. Brodribb, Hastings; Mr. Edmunds, Chesterfield; Mr. Campbell, London; Mr. Davies; Mr. Rose, Southport; Mr. Cartland, Windsor; Mr. Armstrong, Manchester; Mr. H. Kimpton, London; Messrs. Mackay, Edinburgh; Messrs. Griffin and Co., London; Mr. Birchall, Liverpool; Mr. Holtby, York; Mr. Wood, Mortlake; Mr. R. Freeman, London; Messrs. Partridge and Cooper, London; Mr. Herbert Page, London; Mr. Bremridge, London; Mr. T. E. Davies; Mr. Stanmore Bishop, Manchester; Mr. G. P. Field, London; Mr. H. Stott, Friern Barnet; Dr. C. A. Owens, Long Stratton; Dr. Wynn Westcott; Mr. Callander, London; Mr. Lewis, Wakefield; Messrs. Beal and Son, Brighton; Messrs. Reynolds and Branson, Leeds; Mr. Gledhill, Broughton; Mr. Tunmer, Harrogate; Mr. Heap, Hanley; Mr. Beswick, Chester; Messrs. Mariove and Co., Notts; Mr. Brown, Lichfield; Mr. Tubb, Bicester; Mr. Maythorn, Biggleswade; Mr. Evans, Oswestry; Mr. Keating, Manchester; A Subscriber; Lux; M.B., M.C.; Medicus, Eastbourne; T. M.; Lex; A Member of the Royal College of Physicians; B. P., Ottawa; An Old Indian; Ajax; Student; Medicus, Answorth.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. White; Mr. Clark, Doncaster; Mr. Burgess, Manchester; Mr. Watson, Glasgow; Mr. Schluter, Hamburg; Mr. Tupholme; Mr. Macpherson, Middlesbrough; Mr. Mitchell, Holbeach; Mr. Wood, Burton-on-Trent; Mr. Kingsett, London; Dr. Colman, Yeovil; Dr. Waller, Peterboro'; Dr. Rake, Trinidad; Mr. Hodge, Ryde; Mr. Armstrong, Manchester; Mr. Morton, Horncastle; Mr. Norris, Weston-super-Mare; Dr. Hunter, Linlithgow; Messrs. Southall and Co., Birmingham; Mr. Lane, Northampton; Dr. Guisan, Cork; Miss Sullivan, Wolverhampton; Dr. Oliver, Harrogate; Mr. Curme, Childe Okeford; Messrs. Lumleys, London; Mr. Fulton, Toronto; Dr. Austin, Larne; Dr. Hunter, Notts; Mr. Perkins; Mr. O. Hanlon, Spennymoor; Mr. Pentland, Edinburgh; Mr. Draper, Huddersfield; Mr. Kirkby, Leeds; Mr. Craske, London; Mr. Richardson, Rhayader; Mr. Wetwan, Southwold; Mrs. Griffith, London; Mr. Hodgson, Peckham; Mr. Walker, Crick; Mr. Scott, Westray; Messrs. Reed and Co., Bristol; Dr. Kirk, Partick; Mr. Wells, London; Mr. Woodeson, Portsmouth; Mr. Lownds, Newcastle-on-Tyne; Mr. Marrett, Wisbeach; Lieutenant-Colonel Graham, Bristol; Mr. Pearson, Birmingham; Mr. Bryan, Little Hampton; Mr. Thomas, Poplar; Mr. Birch, Wandsworth; Mr. Rawlins, Westgate; Mr. Mitchell; Mr. Bedford, Sheffield; Mr. Waters, Bedford; Dr. Scofield, London; Mr. Price, Liverpool; Mr. Marsden, Edinburgh; Mrs. James, St. John's-wood; Mr. Crocker, Patricroft; Mr. Twyford, Hanley; Dr. Woakes, London; Dr. Eberle, Thirsk; M.D., London; Medicus, London; C. A., Brechin; Medicus, New Brompton; Matron, Liverpool; T. T., Liverpool; Medicus, Huddersfield; A., Liverpool; V.V., Camb.; F.C., Halifax; J.O.Y.; F. F., Leamington; D.S.; Y.A.; A., Newcastle-on-Tyne; M.D., Newcastle-on-Tyne; D. A. T.; Oculist; Alpha, Crones.

Hastings and St. Leonards News, Lincoln Gazette, Lincolnshire Chronicle, Guernsey Star, Fifeshire Journal, North Western Gazette, Sussex Daily News, Liverpool Courier, Kent's Bath Journal, &c., have been received.

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